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July 21, 2015

VIA ELECTRONIC MAIL AND HAND-DELIVERY

Mr. Robert Stein, Chairman
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Docket No. 192B—Towantic Energy, LLC Motion to Reopen and Modify the June 23, 1999 Certificate of Environmental Compatibility and Public Need Based on Changed Conditions Pursuant to Connecticut General Statutes §4-181a(b) for the Construction, Maintenance and Operation of a 785 MW Dual-Fuel Combined Cycle Electric Generating Facility Located North of the Prokop Road and Towantic Hill Road Intersection in the Town of Oxford, Connecticut—*CPV Towantic, LLC's Submittal of Federal Aviation Administration and Naugatuck Water Pollution Control Authority Documents*

Dear Chairman Stein:

In response to Conditions 1.s and 1.t of the Connecticut Siting Council's ("Council") May 14, 2015 Decision and Order in Docket No. 192B, CPV Towantic, LLC ("CPV") submits sixteen (16) copies of the following documents:

1. Eleven (11) Federal Aviation Administration ("FAA") "Determinations of No Hazard to Air Navigation" issued on June 6, 2015. Also enclosed is an FAA "Notice of Valid Petition Received," dated July 8, 2015, and addressed to Raymond Pietrorazio. CPV will file with the Council any additional FAA approval-related documents it receives.

2. Borough of Naugatuck Water Pollution Control Authority approval letter, dated April 20, 2015.

Please contact Franca L. DeRosa, Esq. or me at (860) 509-6500 with any questions.

Very truly yours,

BROWN RUDNICK LLP

Philip M. Small
Counsel for CPV Towantic, LLC

PMS/jmb
Enclosures
cc: Service List

61970451 v1-022345/0005

CERTIFICATE OF SERVICE

This is to certify that on this 21st day of July, 2015, the foregoing documents were sent via electronic mail, and/or first class mail, to the persons on the attached service list.

By: _____
Philip M. Small

SERVICE LIST OF PARTIES AND INTERVENORS

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Applicant	CPV Towantic, L.L.C.	Franca L. DeRosa, Esq. Philip M. Small, Esq. Brown Rudnick LLP 185 Asylum Street Hartford, CT 06103 (860) 509-6500 (860) 509-6501 — fax fderosa@brownrudnick.com psmall@brownrudnick.com
Party	Jay Halpern 58 Jackson Cove Road Oxford, CT 06478 h: (203) 888-4976 zoarmonster@sbcglobal.net Peter Thomas 72 Towantic Hill Road Oxford, CT 06478 (203) 720-1536	
Intervenor	Town of Middlebury	Attorney Dana A. D'Angelo Law Offices of Dana D'Angelo, LLC 20 Woodside Avenue Middlebury, CT 06762 (203) 598-3336 (203) 598-7283 – fax Dangelo.middlebury@snet.net Stephen L. Savarese, Esq. 103 South Main Street Newtown, CT 06470 203-270-0077 attystephensavarese@gmail.com

Intervenor	The Connecticut Light and Power Company (CL&P)	Stephen Gibelli, Esq. Associate General Counsel The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5513 (860) 665-5504 –fax gibels@nu.com John R. Morissette Manager-Transmission Siting and Permitting The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-2036 morisjr@nu.com Christopher R. Bernard Manager, Regulatory Policy (Transmission) The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5967 (860) 665-3314 – fax bernacr@nu.com Stella Pace, Senior Engineer The Connecticut Light and Power Company Transmission and Interconnection Dept. P.O. Box 270 Hartford, CT 06141-0270 (860) 665-3569 pacess@nu.com Jeffery D. Cochran Northeast Utilities Service Company 107 Selden Street Berlin, CT 06037 860-665-3548 cochrjd@nu.com
Party	Town of Oxford	Kevin W. Condon, Esq. Condon & Savitt PC P.O. Box 570 Ansonia, CT 06401 203-734-2511 condonsavitt@comcast.net
Party	Naugatuck Valley Chapter Trout Unlimited	Robert M. Perrella, Vice President TU Naugatuck/Pomperaug Valley Chapter 278 W. Purchase Road Southbury, CT 06488-1004 johnnytroutseed@charter.net

Intervenor	Town of Southbury	Ed Edelson First Selectman Town of Southbury 501 Main Street Southbury, CT 06488 (203) 262-0647 (203) 264-9762 – fax selectman@southbury-ct.gov
Party	The Pomperaug River Watershed Coalition	Len DeJong, Executive Director Pomperaug River Watershed Coalition 39 Sherman Hill Road, C103 Woodbury, CT 06798 203-263-0076 LDeJong@pomperaug.org
Intervenor (approved 06/07/06)	Raymond Pietrorazio 764 Charcoal Avenue Middlebury, CT 06762-1311 (203) 758-2413 (203) 758-9519 – fax ray@ctcombustion.com	
Intervenor (approved 10/10/06)	GE Energy Financial Services, Inc.	Jay F. Malcynsky The Law Offices of Jay F. Malcynsky, P.C. One Liberty Square New Britain, CT 06051 (860) 229-0301 (860) 225-4627 – fax Jmalcynsky@gaffneybennett.com
Intervenor (Approved 11/13/14)	Borough of Naugatuck and Borough of Naugatuck Water Pollution Control Authority	Edward G. Fitzpatrick, Esq. Alicia K. Perillo, Esq. Fitzpatrick, Mariano, Santos, Sousa, PC 203 Church Street Naugatuck, CT 06770 203-729-4555 Fitz@fmslaw.org Alicia@fmslaw.org Ronald Merancy, Chairman Water Pollution Control Authority 229 Church Street Naugatuck, CT 06770 203-720-7000 Rjm62159@aol.com
Intervenor (Approved 1/8/15)	Wayne McCormack 593 Putting Green Lane Oxford, CT 06478 wayne@waynemccormack.com	

Intervenor (Approved 1/8/15)	Naugatuck River Revival Group, Inc.	Kevin R. Zak, President Naugatuck River Revival Group, Inc. 132 Radnor Avenue Naugatuck, CT 06770 203-530-7850 kznrrg@sbcglobal.net
Intervenor (Approved 1/8/15)	Westover Hills Subdivision Homeowners	Chester Cornacchia Westover Hills Subdivision Homeowners 53 Graham Ridge Road Naugatuck, CT 06770 203-206-9927 cc@necsonline.com
Intervenor (Approved 1/8/15)	Westover School	Kate J. Truini Alice Hallaran Westover School 1237 Whittemore Road Middlebury, CT 06762 203-758-2423 ktruini@westoverschool.org ahallaran@westoverschool.org
Intervenor (Approved 1/8/15)	Greenfields, LLC and Marian Larkin	Edward S. Hill, Esq. Cappalli & Hill, LLC 325 Highland Avenue Cheshire, CT 06410 203-272-2607 ehill@cappallihill.com
Intervenor (Approved 1/8/15)	Lake Quassapaug Association, LLC	Ingrid Manning, Vice President Lake Quassapaug Association, LLC P.O. Box 285 Middlebury, CT 06762 203-758-1692 Ingridmanning2@gmail.com
Intervenor (Approved 1/8/15)	Middlebury Land Trust, Inc.	W. Scott Peterson, M.D., President Middlebury Land Trust, Inc. 317 Tranquility Road Middlebury, CT 06762 203-574-2020 wsp@aya.yale.edu
Intervenor (Approved 1/15/15)	Quassy Amusement Park	George Frantzis Quassy Amusement Park P.O. Box 1107 Middlebury, CT 06762 203-758-2913 x108 George@quassy.com

Intervenor (Approved 1/15/15)	Middlebury Bridle Land Association	Nancy Vaughan Middlebury Bridle Land Association 64 Sandy Hill Road Middlebury, CT 06762 203-598-0697 ndzijavaughan@gmail.com
Intervenor (Approved 1/15/15)	Dennis Kocyla 28 Benz Street Ansonia, CT 06401 203-736-7182 Dennis3141@yahoo.com	
Intervenor (Approved 1/15/15)	Naugatuck Valley Audubon Society	Sophie Zyla Jeff Ruhloff Carl Almonte Naugatuck Valley Audubon Society 17 Stoddard Place Beacon Falls, CT 06403 203-888-7945 NVASeditor@mail.com
Intervenor (Approved 1/15/15)	Oxford Flying Club	Burton L. Stevens Oxford Flying Club P.O. Box 371 Woodbury, CT 06798 203-236-5158 bstevens@snet.net

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1911-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Air-Cooled Condenser
Location:	Oxford, CT
Latitude:	41-28-59.28N NAD 83
Longitude:	73-07-22.57W
Heights:	830 feet site elevation (SE)
	85 feet above ground level (AGL)
	915 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Any height exceeding 85 feet above ground level (915 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1911-OE.

Signature Control No: 228977202-254161788 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1911-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

2014-ANE-1770-OE 41-29-01.44N 73-07-17.91W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1771-OE 41-29-01.13N 73-07-19.66W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1908-OE 41-29-02.91N 73-07-23.40W 62 ft. AGL/892 ft. AMSL (Aux Boiler Stack)
2014-ANE-1909-OE 41-29-02.56N 73-07-23.61W 83 ft. AGL/913 ft. AMSL (Gantry Crane)
2014-ANE-1910-OE 41-28-59.75N 73-07-17.26W 48 ft. AGL/878 ft. AMSL (Fuel Oil Tank)
2014-ANE-1911-OE 41-28-59.28N 73-07-22.57W 85 ft. AGL/915 ft. AMSL (Air Condenser)
2014-ANE-1912-OE 41-29-07.68N 73-07-22.37W 65 ft. AGL/895 ft. AMSL (Switchyard Tower)
2014-ANE-1923-OE 41-29-03.26N 73-07-23.61W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1924-OE 41-29-02.69N 73-07-23.43W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1925-OE 41-29-03.10N 73-07-21.05W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1926-OE 41-29-03.67N 73-07-21.22W 52 ft. AGL/882 ft. AMSL (Admin BLDG)

To facilitate the public comment process, all proposals which exceeded a Title 14 CFR Part 77 obstruction standard were included in the public notice issued under case study 2014-ANE-1770-OE. However, separate determinations will be made for each case. All comments received by the circularization deadline of February 27, 2015 were considered in completing each determination for the case studies listed above.

The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surfaces established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures also exceed the VFR traffic patterns Horizontal Surface as applied to visual approach runways at OXC by the following:

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures were circularized on January 21, 2015 under case study 2014-ANE-1770-OE, as previously mentioned, to all know aviation interests and non-aeronautical interests that may be affected by the proposal. Five letters of objection were received by the date due for consideration as a result of circularization and summarized below:

Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

That said, although stack effluents is not germane to an airspace study, the question was asked in the spirit of addressing the responders' concerns. Effluents generated from the stacks will be composed largely of air, and at times water vapor, covered under the appropriate air permits issued by the Connecticut Department of Energy and Environmental Protection (DEEP). Other pollutants must maintain levels consistent with DEEP permitting requirements. The proponent has advised that in most atmospheric conditions no water vapor would be visible. Under cold outside air temperatures (below 40 degrees Fahrenheit or 100 percent humidity), some visible water vapor could be generated, but it would dissipate prior to reaching traffic pattern altitude. The expected temperature of the effluent as it reaches the top of the stacks should be between 184 degrees and 294.5 degrees Fahrenheit and would also rapidly dissipate. Increased wind velocity and colder ambient temperatures result in even more rapid cooling. Prevailing winds in the area of OXC have a westerly or northerly component and would aid in moving possible effluents away from the airport.

As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

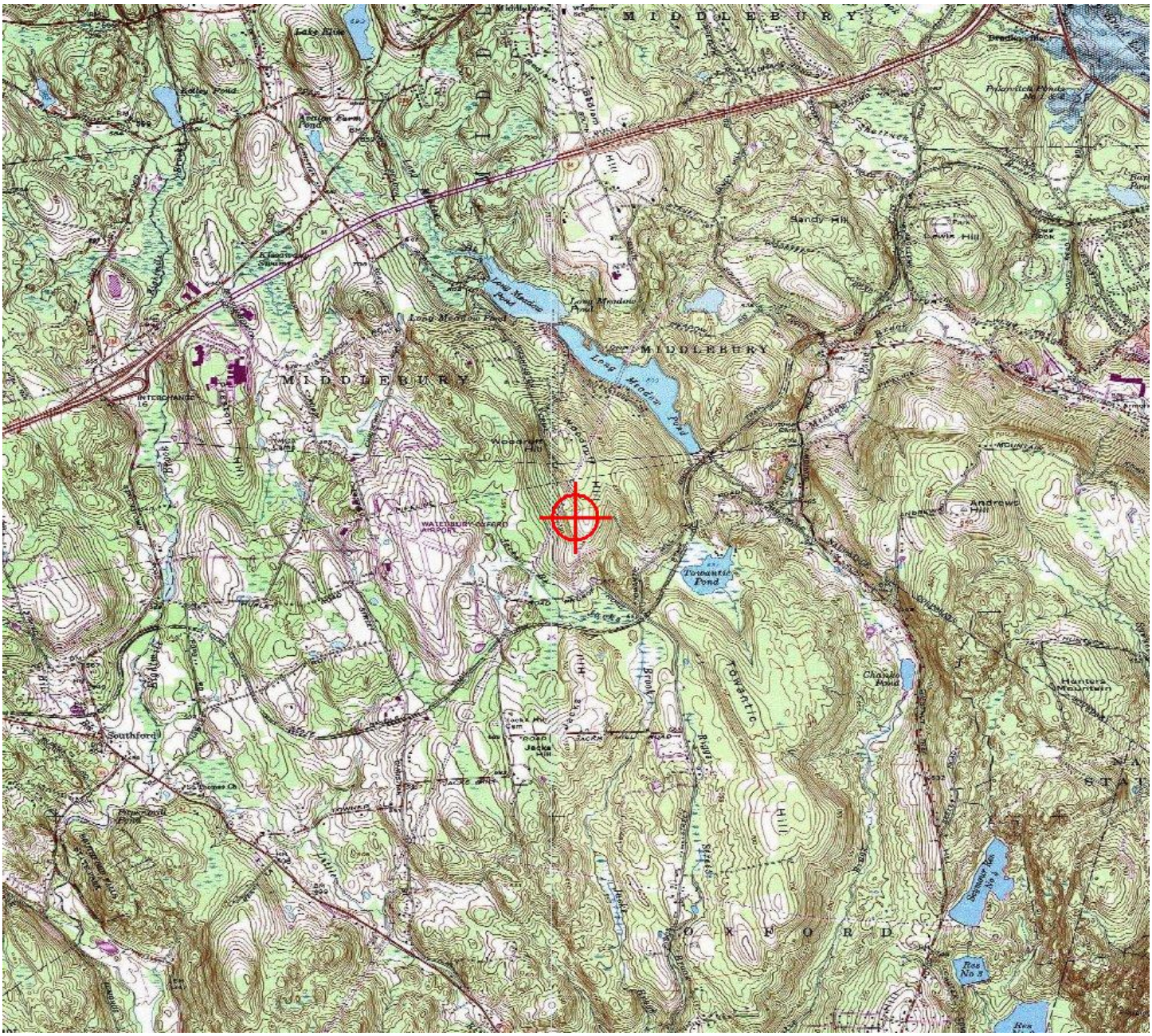
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

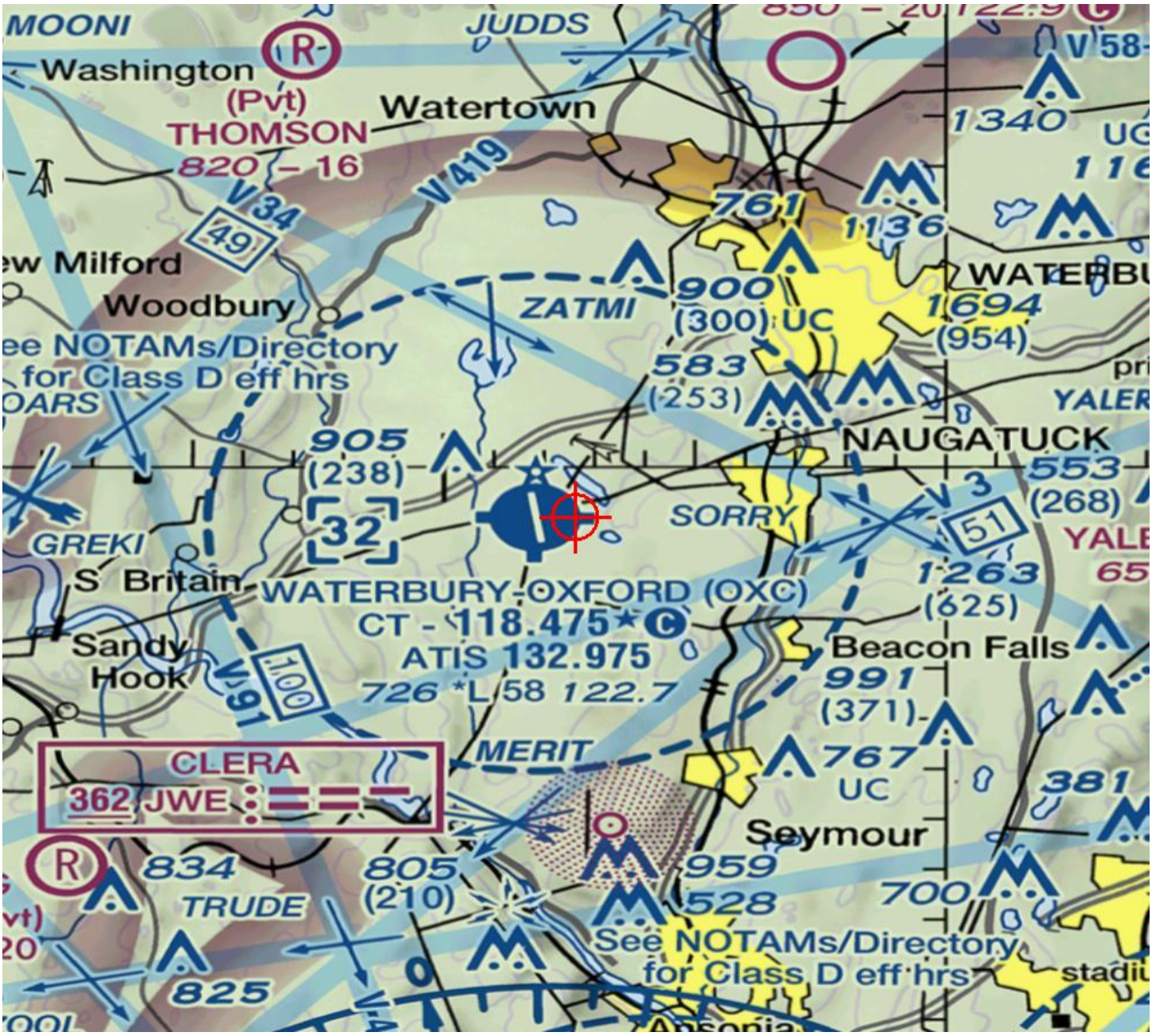
Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1911-OE

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Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1926-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building Administrative Building (NE Corner)
Location:	Oxford, CT
Latitude:	41-29-03.67N NAD 83
Longitude:	73-07-21.22W
Heights:	830 feet site elevation (SE)
	52 feet above ground level (AGL)
	882 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, red lights - Chapters 4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

Any height exceeding 52 feet above ground level (882 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed

structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1926-OE.

Signature Control No: 229148148-254162403 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1926-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

2014-ANE-1770-OE 41-29-01.44N 73-07-17.91W 150 ft. AGL/980 ft. AMSL (Stack)
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2014-ANE-1909-OE 41-29-02.56N 73-07-23.61W 83 ft. AGL/913 ft. AMSL (Gantry Crane)
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2014-ANE-1911-OE 41-28-59.28N 73-07-22.57W 85 ft. AGL/915 ft. AMSL (Air Condenser)
2014-ANE-1912-OE 41-29-07.68N 73-07-22.37W 65 ft. AGL/895 ft. AMSL (Switchyard Tower)
2014-ANE-1923-OE 41-29-03.26N 73-07-23.61W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1924-OE 41-29-02.69N 73-07-23.43W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1925-OE 41-29-03.10N 73-07-21.05W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1926-OE 41-29-03.67N 73-07-21.22W 52 ft. AGL/882 ft. AMSL (Admin BLDG)

To facilitate the public comment process, all proposals which exceeded a Title 14 CFR Part 77 obstruction standard were included in the public notice issued under case study 2014-ANE-1770-OE. However, separate determinations will be made for each case. All comments received by the circularization deadline of February 27, 2015 were considered in completing each determination for the case studies listed above.

The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surfaces established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
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2014-ANE-1912-OE: Exceeds by up to 19 ft.
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2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures also exceed the VFR traffic patterns Horizontal Surface as applied to visual approach runways at OXC by the following:

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
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2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures were circularized on January 21, 2015 under case study 2014-ANE-1770-OE, as previously mentioned, to all know aviation interests and non-aeronautical interests that may be affected by the proposal. Five letters of objection were received by the date due for consideration as a result of circularization and summarized below:

Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

That said, although stack effluents is not germane to an airspace study, the question was asked in the spirit of addressing the responders' concerns. Effluents generated from the stacks will be composed largely of air, and at times water vapor, covered under the appropriate air permits issued by the Connecticut Department of Energy and Environmental Protection (DEEP). Other pollutants must maintain levels consistent with DEEP permitting requirements. The proponent has advised that in most atmospheric conditions no water vapor would be visible. Under cold outside air temperatures (below 40 degrees Fahrenheit or 100 percent humidity), some visible water vapor could be generated, but it would dissipate prior to reaching traffic pattern altitude. The expected temperature of the effluent as it reaches the top of the stacks should be between 184 degrees and 294.5 degrees Fahrenheit and would also rapidly dissipate. Increased wind velocity and colder ambient temperatures result in even more rapid cooling. Prevailing winds in the area of OXC have a westerly or northerly component and would aid in moving possible effluents away from the airport.

As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

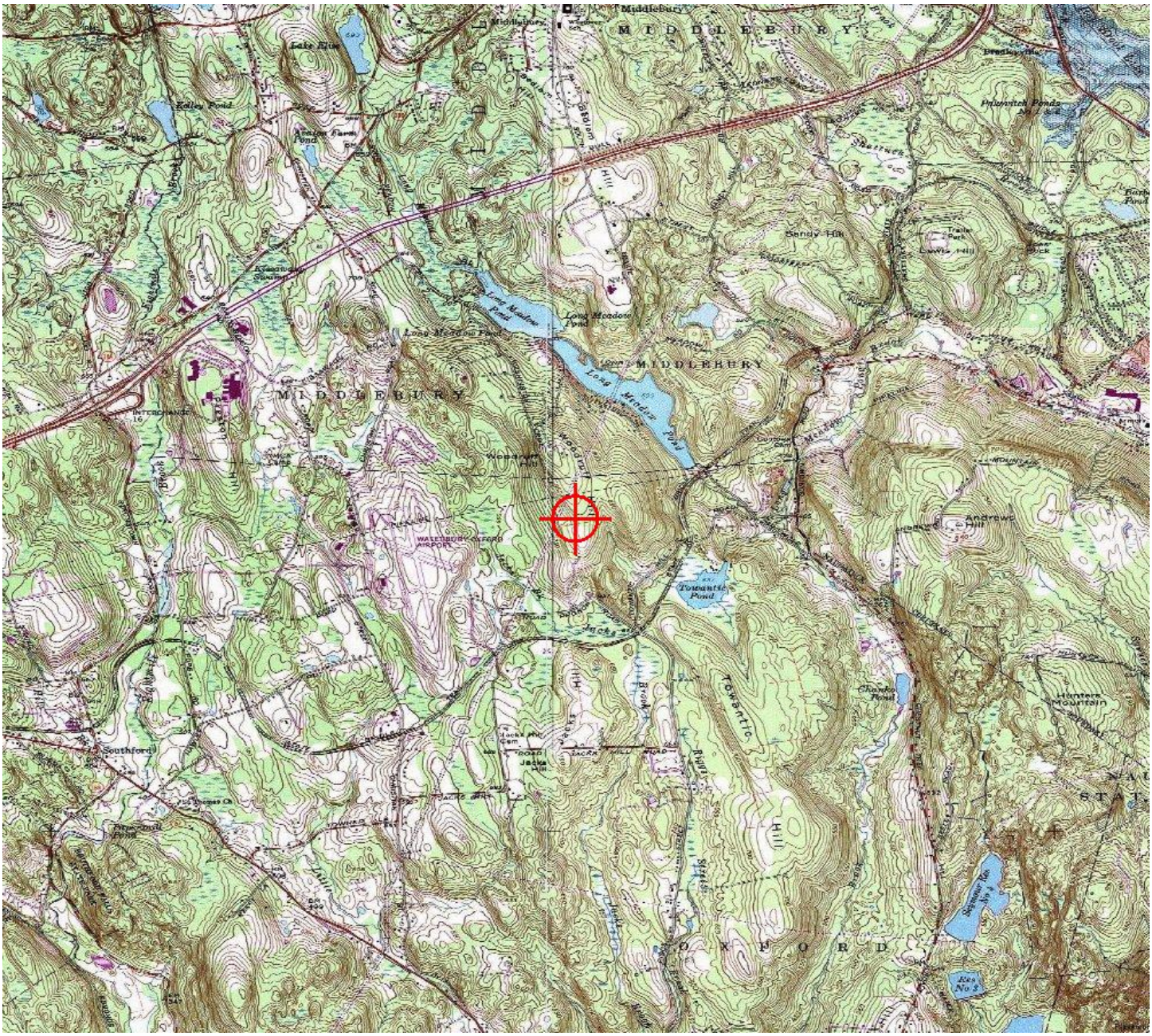
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1926-OE

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for Class D eff hrs

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1923-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building Administrative Building (NW Corner)
Location:	Oxford, CT
Latitude:	41-29-03.26N NAD 83
Longitude:	73-07-23.61W
Heights:	830 feet site elevation (SE)
	52 feet above ground level (AGL)
	882 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, red lights - Chapters 4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

Any height exceeding 52 feet above ground level (882 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

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structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1923-OE.

Signature Control No: 229148142-254162405 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1923-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

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As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

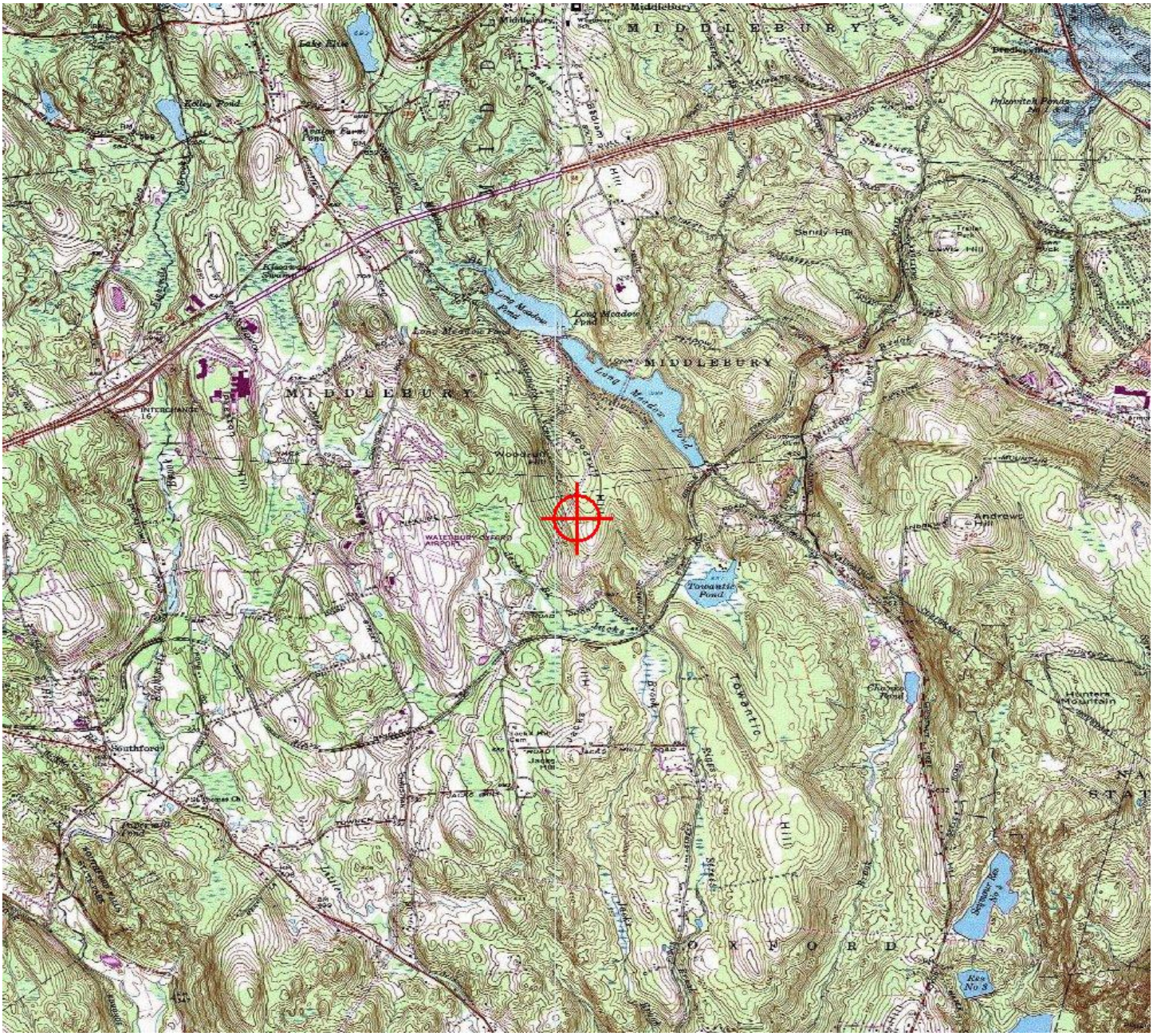
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

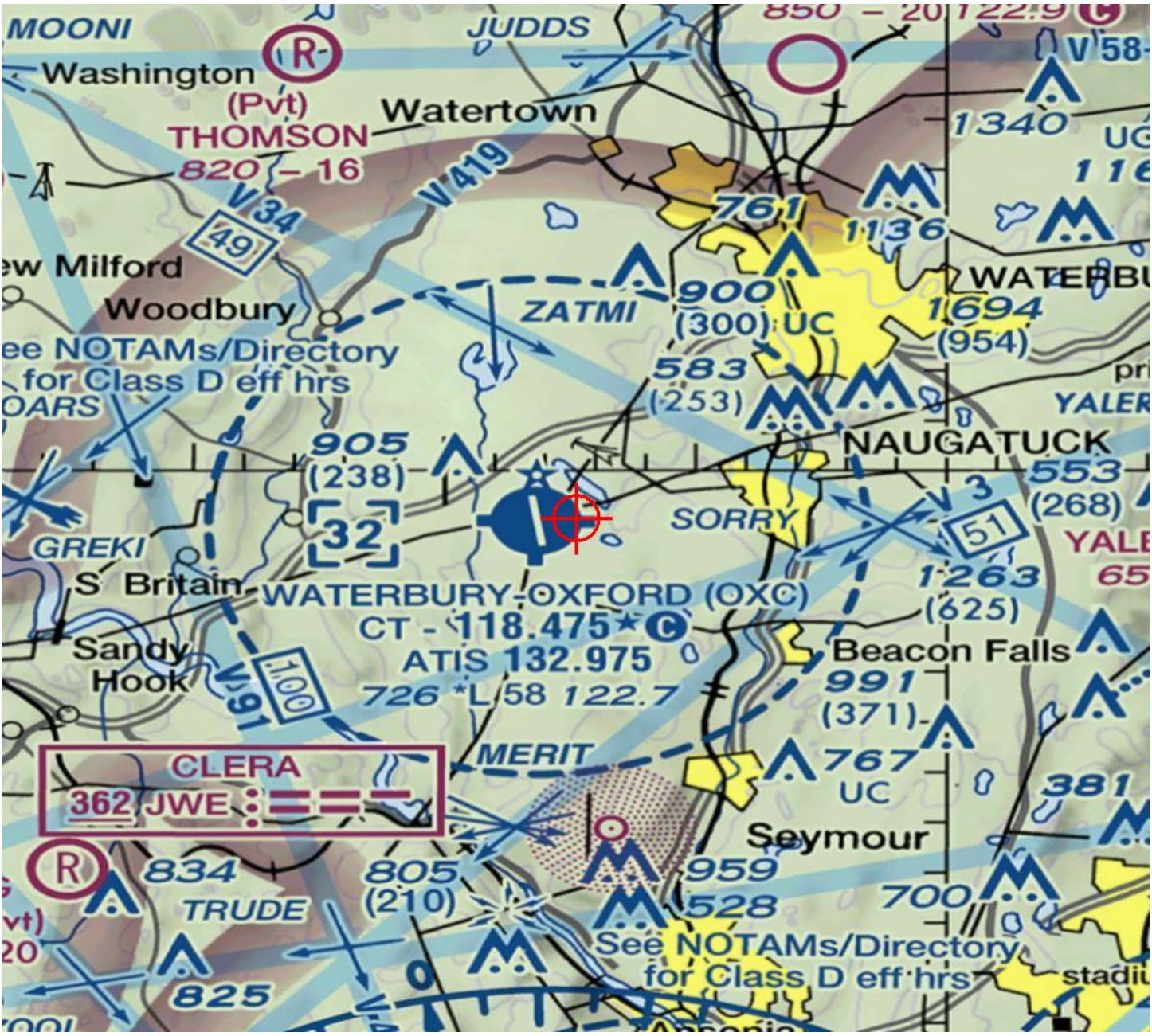
Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1923-OE

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for Class D eff hrs
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Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1925-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building Administrative Building (SE Corner)
Location:	Oxford, CT
Latitude:	41-29-03.10N NAD 83
Longitude:	73-07-21.05W
Heights:	830 feet site elevation (SE)
	52 feet above ground level (AGL)
	882 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, red lights - Chapters 4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

Any height exceeding 52 feet above ground level (882 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed

structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1925-OE.

Signature Control No: 229148145-254162406 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1925-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

2014-ANE-1770-OE 41-29-01.44N 73-07-17.91W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1771-OE 41-29-01.13N 73-07-19.66W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1908-OE 41-29-02.91N 73-07-23.40W 62 ft. AGL/892 ft. AMSL (Aux Boiler Stack)
2014-ANE-1909-OE 41-29-02.56N 73-07-23.61W 83 ft. AGL/913 ft. AMSL (Gantry Crane)
2014-ANE-1910-OE 41-28-59.75N 73-07-17.26W 48 ft. AGL/878 ft. AMSL (Fuel Oil Tank)
2014-ANE-1911-OE 41-28-59.28N 73-07-22.57W 85 ft. AGL/915 ft. AMSL (Air Condenser)
2014-ANE-1912-OE 41-29-07.68N 73-07-22.37W 65 ft. AGL/895 ft. AMSL (Switchyard Tower)
2014-ANE-1923-OE 41-29-03.26N 73-07-23.61W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1924-OE 41-29-02.69N 73-07-23.43W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1925-OE 41-29-03.10N 73-07-21.05W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1926-OE 41-29-03.67N 73-07-21.22W 52 ft. AGL/882 ft. AMSL (Admin BLDG)

To facilitate the public comment process, all proposals which exceeded a Title 14 CFR Part 77 obstruction standard were included in the public notice issued under case study 2014-ANE-1770-OE. However, separate determinations will be made for each case. All comments received by the circularization deadline of February 27, 2015 were considered in completing each determination for the case studies listed above.

The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surfaces established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures also exceed the VFR traffic patterns Horizontal Surface as applied to visual approach runways at OXC by the following:

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures were circularized on January 21, 2015 under case study 2014-ANE-1770-OE, as previously mentioned, to all know aviation interests and non-aeronautical interests that may be affected by the proposal. Five letters of objection were received by the date due for consideration as a result of circularization and summarized below:

Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

That said, although stack effluents is not germane to an airspace study, the question was asked in the spirit of addressing the responders' concerns. Effluents generated from the stacks will be composed largely of air, and at times water vapor, covered under the appropriate air permits issued by the Connecticut Department of Energy and Environmental Protection (DEEP). Other pollutants must maintain levels consistent with DEEP permitting requirements. The proponent has advised that in most atmospheric conditions no water vapor would be visible. Under cold outside air temperatures (below 40 degrees Fahrenheit or 100 percent humidity), some visible water vapor could be generated, but it would dissipate prior to reaching traffic pattern altitude. The expected temperature of the effluent as it reaches the top of the stacks should be between 184 degrees and 294.5 degrees Fahrenheit and would also rapidly dissipate. Increased wind velocity and colder ambient temperatures result in even more rapid cooling. Prevailing winds in the area of OXC have a westerly or northerly component and would aid in moving possible effluents away from the airport.

As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

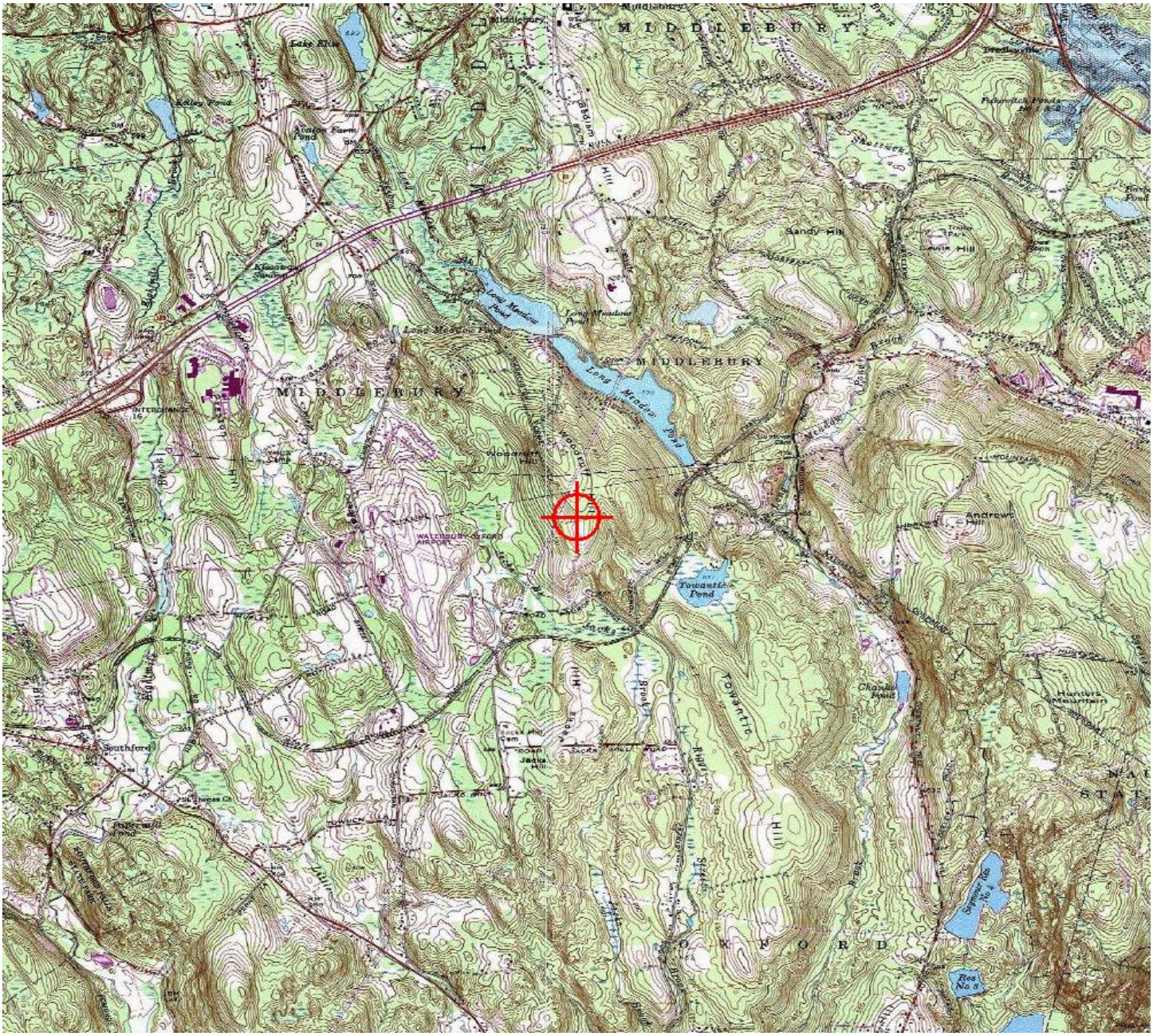
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

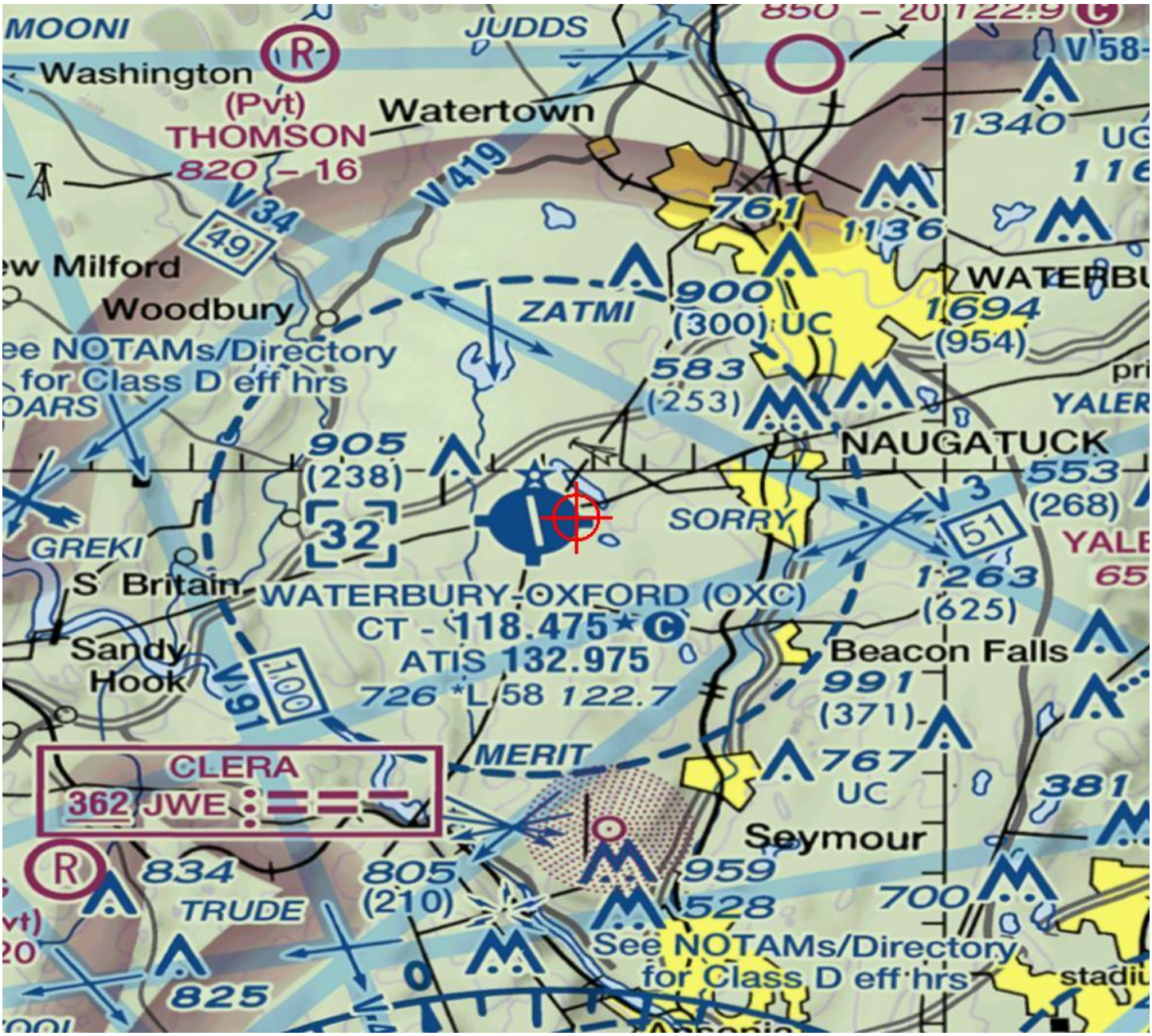
Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1925-OE

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for Class D eff hrs
825

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1924-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building Administrative Building (SW Corner)
Location:	Oxford, CT
Latitude:	41-29-02.69N NAD 83
Longitude:	73-07-23.43W
Heights:	830 feet site elevation (SE)
	52 feet above ground level (AGL)
	882 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, red lights - Chapters 4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

Any height exceeding 52 feet above ground level (882 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed

structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1924-OE.

Signature Control No: 229148143-254162404 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1924-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

2014-ANE-1770-OE 41-29-01.44N 73-07-17.91W 150 ft. AGL/980 ft. AMSL (Stack)
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To facilitate the public comment process, all proposals which exceeded a Title 14 CFR Part 77 obstruction standard were included in the public notice issued under case study 2014-ANE-1770-OE. However, separate determinations will be made for each case. All comments received by the circularization deadline of February 27, 2015 were considered in completing each determination for the case studies listed above.

The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surfaces established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

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2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures also exceed the VFR traffic patterns Horizontal Surface as applied to visual approach runways at OXC by the following:

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures were circularized on January 21, 2015 under case study 2014-ANE-1770-OE, as previously mentioned, to all know aviation interests and non-aeronautical interests that may be affected by the proposal. Five letters of objection were received by the date due for consideration as a result of circularization and summarized below:

Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

That said, although stack effluents is not germane to an airspace study, the question was asked in the spirit of addressing the responders' concerns. Effluents generated from the stacks will be composed largely of air, and at times water vapor, covered under the appropriate air permits issued by the Connecticut Department of Energy and Environmental Protection (DEEP). Other pollutants must maintain levels consistent with DEEP permitting requirements. The proponent has advised that in most atmospheric conditions no water vapor would be visible. Under cold outside air temperatures (below 40 degrees Fahrenheit or 100 percent humidity), some visible water vapor could be generated, but it would dissipate prior to reaching traffic pattern altitude. The expected temperature of the effluent as it reaches the top of the stacks should be between 184 degrees and 294.5 degrees Fahrenheit and would also rapidly dissipate. Increased wind velocity and colder ambient temperatures result in even more rapid cooling. Prevailing winds in the area of OXC have a westerly or northerly component and would aid in moving possible effluents away from the airport.

As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

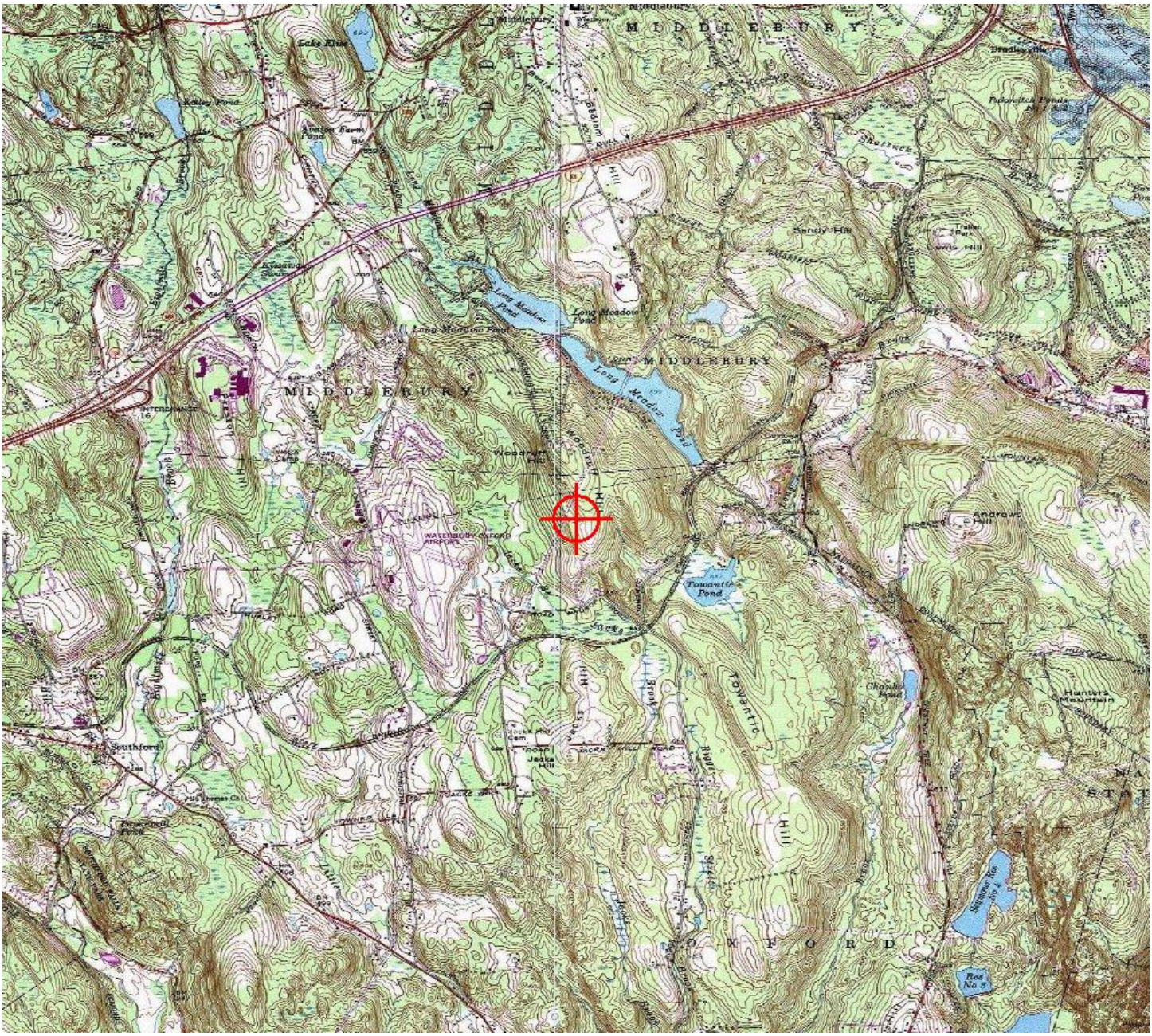
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1924-OE

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for Class D eff hrs
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Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1908-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Stack Auxiliary Boiler Stack
Location:	Oxford, CT
Latitude:	41-29-02.91N NAD 83
Longitude:	73-07-23.40W
Heights:	830 feet site elevation (SE)
	62 feet above ground level (AGL)
	892 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, paint/red lights - Chapters 3(Marked),4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Any height exceeding 62 feet above ground level (892 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1908-OE.

Signature Control No: 228977199-254161062 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1908-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

2014-ANE-1770-OE 41-29-01.44N 73-07-17.91W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1771-OE 41-29-01.13N 73-07-19.66W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1908-OE 41-29-02.91N 73-07-23.40W 62 ft. AGL/892 ft. AMSL (Aux Boiler Stack)
2014-ANE-1909-OE 41-29-02.56N 73-07-23.61W 83 ft. AGL/913 ft. AMSL (Gantry Crane)
2014-ANE-1910-OE 41-28-59.75N 73-07-17.26W 48 ft. AGL/878 ft. AMSL (Fuel Oil Tank)
2014-ANE-1911-OE 41-28-59.28N 73-07-22.57W 85 ft. AGL/915 ft. AMSL (Air Condenser)
2014-ANE-1912-OE 41-29-07.68N 73-07-22.37W 65 ft. AGL/895 ft. AMSL (Switchyard Tower)
2014-ANE-1923-OE 41-29-03.26N 73-07-23.61W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1924-OE 41-29-02.69N 73-07-23.43W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1925-OE 41-29-03.10N 73-07-21.05W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1926-OE 41-29-03.67N 73-07-21.22W 52 ft. AGL/882 ft. AMSL (Admin BLDG)

To facilitate the public comment process, all proposals which exceeded a Title 14 CFR Part 77 obstruction standard were included in the public notice issued under case study 2014-ANE-1770-OE. However, separate determinations will be made for each case. All comments received by the circularization deadline of February 27, 2015 were considered in completing each determination for the case studies listed above.

The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surfaces established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
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Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

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The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

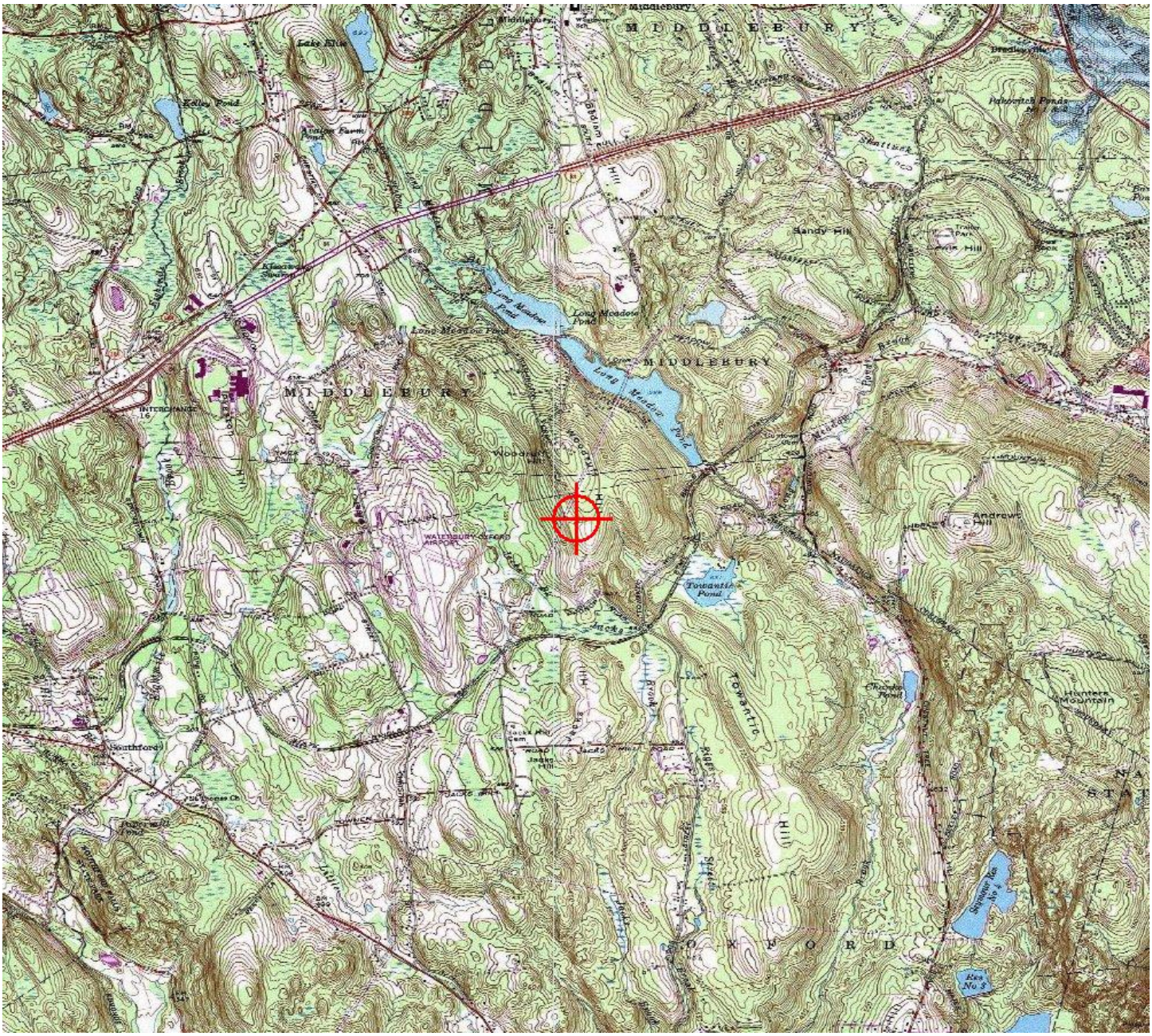
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1908-OE

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Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1910-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Fuel Oil Storage Tank
Location:	Oxford, CT
Latitude:	41-28-59.75N NAD 83
Longitude:	73-07-17.26W
Heights:	830 feet site elevation (SE)
	48 feet above ground level (AGL)
	878 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, paint/red lights - Chapters 3(Marked),4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Any height exceeding 48 feet above ground level (878 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1910-OE.

Signature Control No: 228977201-254161447 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1910-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

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2014-ANE-1909-OE 41-29-02.56N 73-07-23.61W 83 ft. AGL/913 ft. AMSL (Gantry Crane)
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2014-ANE-1911-OE 41-28-59.28N 73-07-22.57W 85 ft. AGL/915 ft. AMSL (Air Condenser)
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The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

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Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

2014-ANE-1770-OE: Exceeds by up to 104 ft.
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2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

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2014-ANE-1770-OE: Exceeds by up to 104 ft.
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The proposed structures were circularized on January 21, 2015 under case study 2014-ANE-1770-OE, as previously mentioned, to all know aviation interests and non-aeronautical interests that may be affected by the proposal. Five letters of objection were received by the date due for consideration as a result of circularization and summarized below:

Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

That said, although stack effluents is not germane to an airspace study, the question was asked in the spirit of addressing the responders' concerns. Effluents generated from the stacks will be composed largely of air, and at times water vapor, covered under the appropriate air permits issued by the Connecticut Department of Energy and Environmental Protection (DEEP). Other pollutants must maintain levels consistent with DEEP permitting requirements. The proponent has advised that in most atmospheric conditions no water vapor would be visible. Under cold outside air temperatures (below 40 degrees Fahrenheit or 100 percent humidity), some visible water vapor could be generated, but it would dissipate prior to reaching traffic pattern altitude. The expected temperature of the effluent as it reaches the top of the stacks should be between 184 degrees and 294.5 degrees Fahrenheit and would also rapidly dissipate. Increased wind velocity and colder ambient temperatures result in even more rapid cooling. Prevailing winds in the area of OXC have a westerly or northerly component and would aid in moving possible effluents away from the airport.

As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

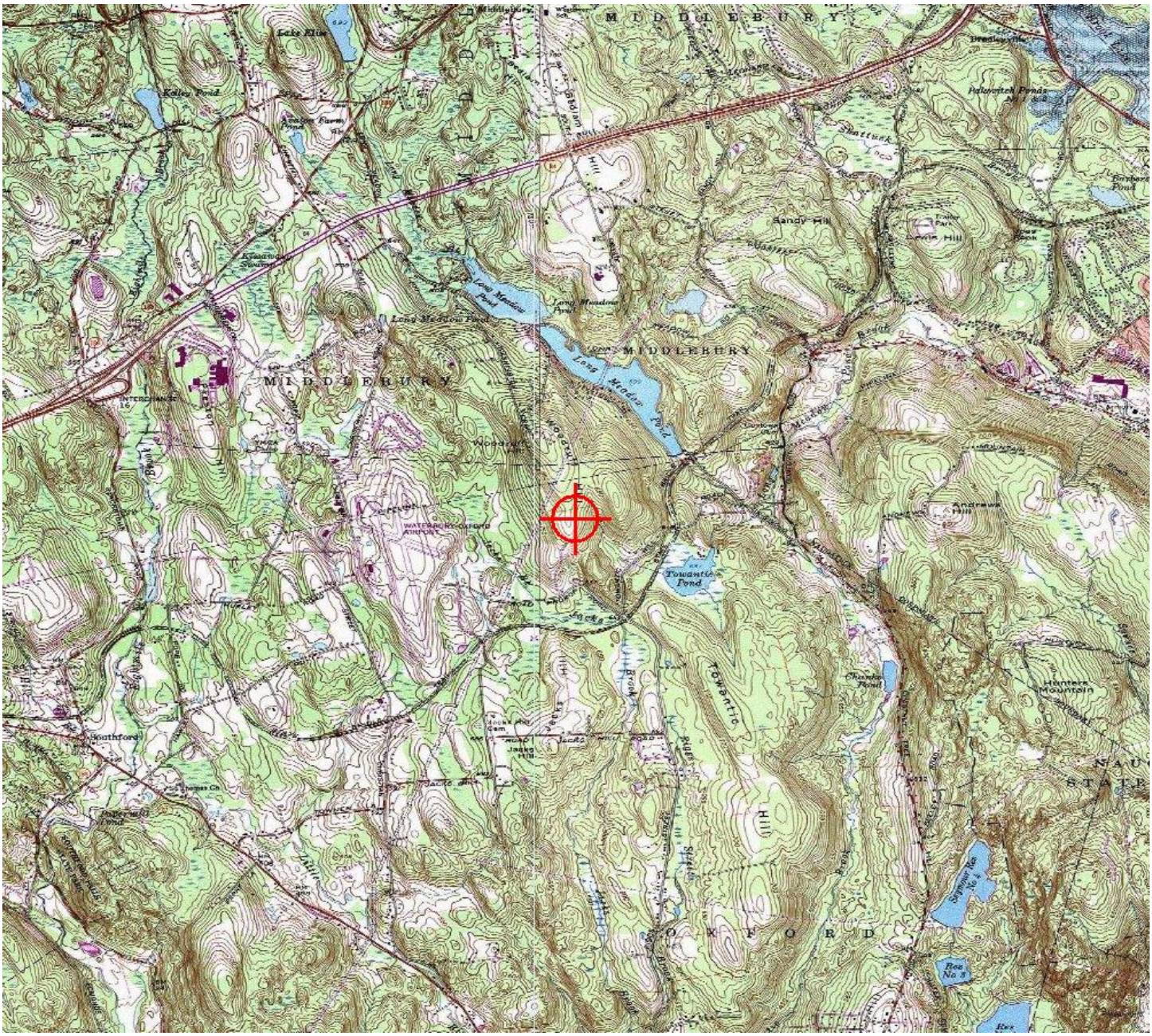
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

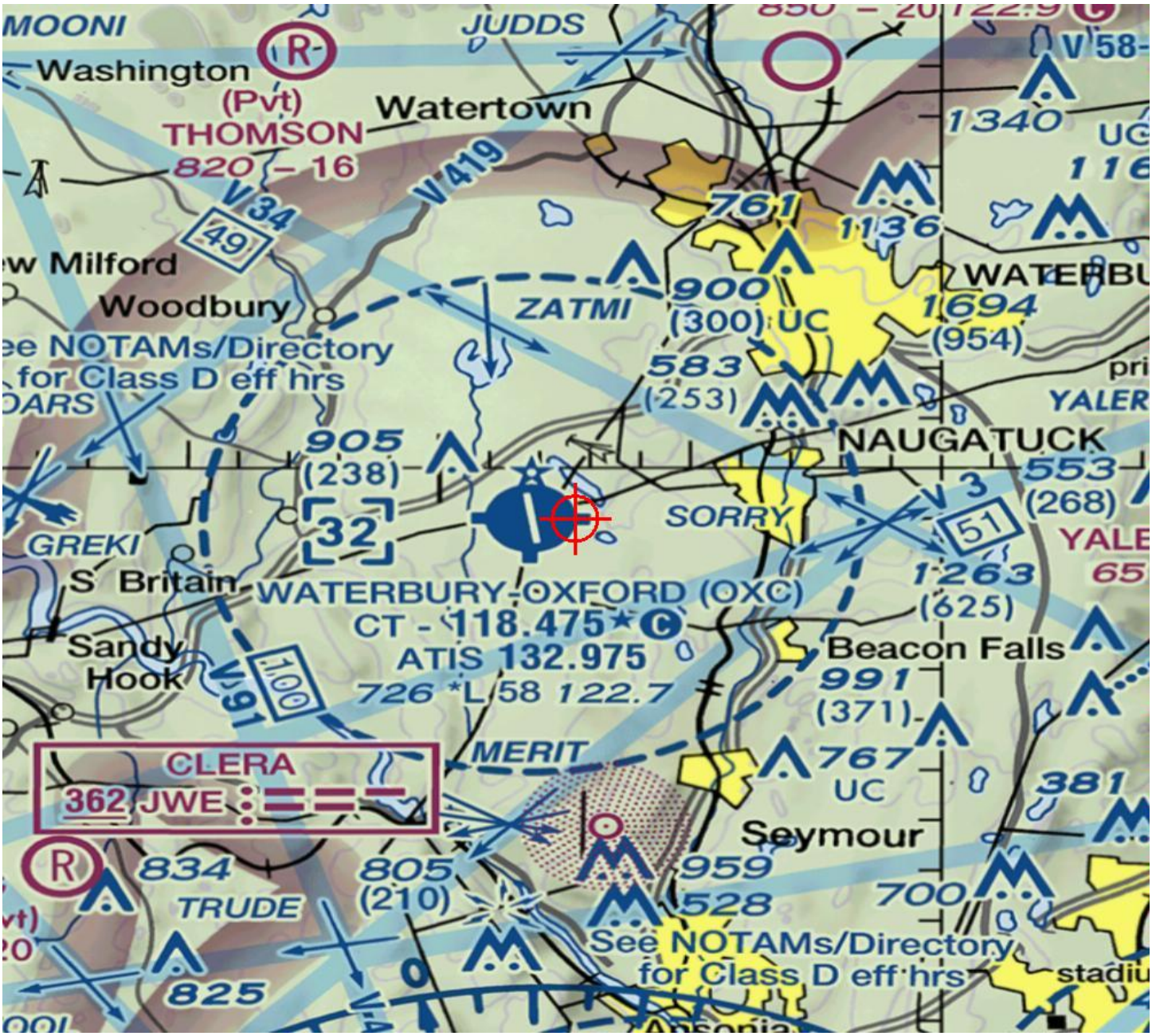
Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1910-OE




MOONI
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Woodbury
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ATIS 132.975
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Sandy
Hook
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V 91
Beacon Falls
991
(371)
MERIT
767
UC
381
CLERA
362 JWE
Seymour
834
805
(210)
959
528
700
TRUDE
See NOTAMs/Directory
for Class D eff hrs
825

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1909-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Gantry Crane
Location:	Oxford, CT
Latitude:	41-29-02.56N NAD 83
Longitude:	73-07-23.61W
Heights:	830 feet site elevation (SE)
	83 feet above ground level (AGL)
	913 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, flags/red lights - Chapters 3(Marked),4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Any height exceeding 83 feet above ground level (913 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

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Signature Control No: 228977200-254161366 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
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Case Description
Map(s)

Additional information for ASN 2014-ANE-1909-OE

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It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

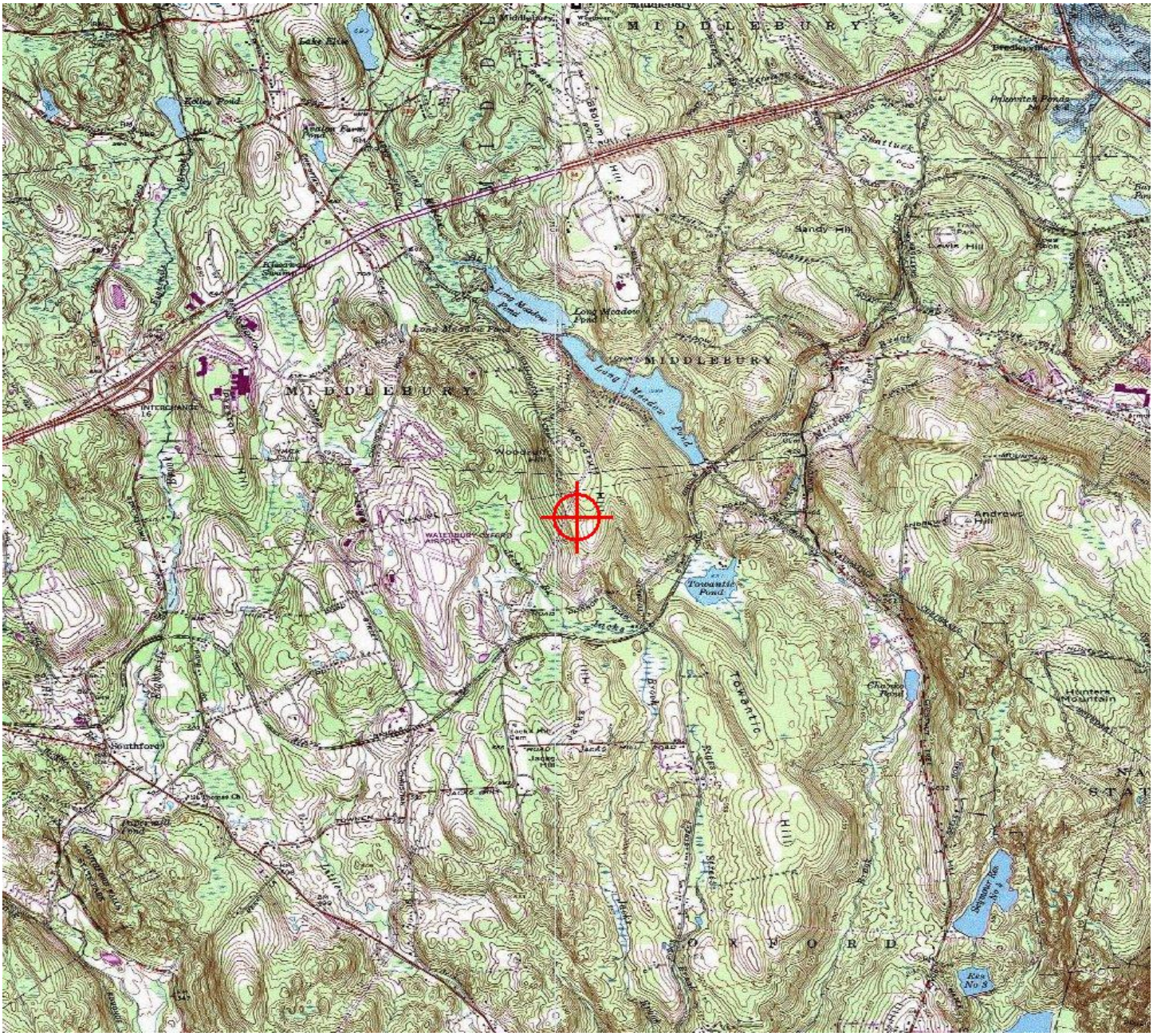
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

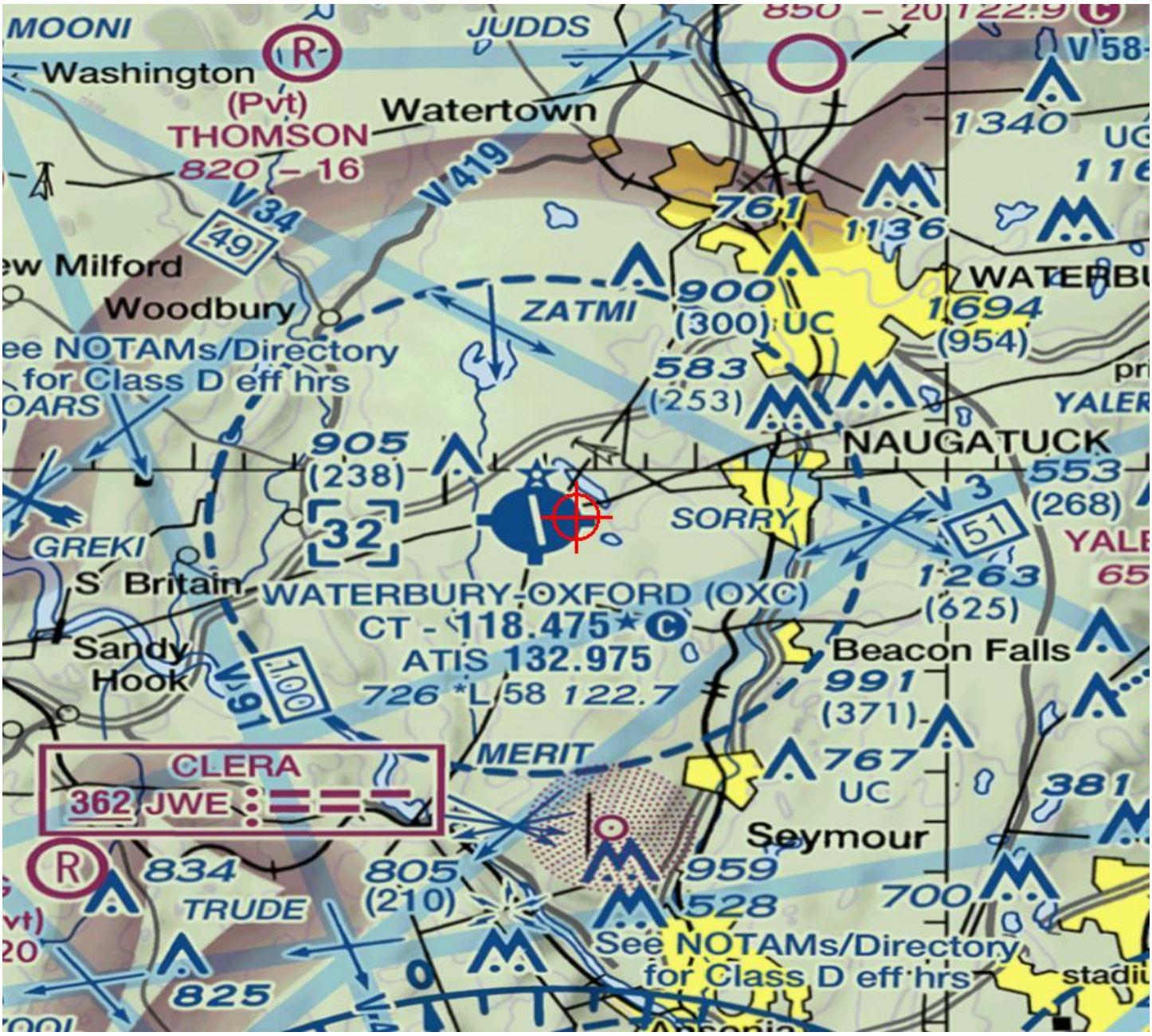
Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1909-OE

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for Class D eff hrs

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1770-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Stack Stack #1
Location:	Oxford, CT
Latitude:	41-29-01.44N NAD 83
Longitude:	73-07-17.91W
Heights:	830 feet site elevation (SE)
	150 feet above ground level (AGL)
	980 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, paint/red lights - Chapters 3(Marked),4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Any height exceeding 150 feet above ground level (980 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1770-OE.

Signature Control No: 227940257-254149213 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1770-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

2014-ANE-1770-OE 41-29-01.44N 73-07-17.91W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1771-OE 41-29-01.13N 73-07-19.66W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1908-OE 41-29-02.91N 73-07-23.40W 62 ft. AGL/892 ft. AMSL (Aux Boiler Stack)
2014-ANE-1909-OE 41-29-02.56N 73-07-23.61W 83 ft. AGL/913 ft. AMSL (Gantry Crane)
2014-ANE-1910-OE 41-28-59.75N 73-07-17.26W 48 ft. AGL/878 ft. AMSL (Fuel Oil Tank)
2014-ANE-1911-OE 41-28-59.28N 73-07-22.57W 85 ft. AGL/915 ft. AMSL (Air Condenser)
2014-ANE-1912-OE 41-29-07.68N 73-07-22.37W 65 ft. AGL/895 ft. AMSL (Switchyard Tower)
2014-ANE-1923-OE 41-29-03.26N 73-07-23.61W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1924-OE 41-29-02.69N 73-07-23.43W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1925-OE 41-29-03.10N 73-07-21.05W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1926-OE 41-29-03.67N 73-07-21.22W 52 ft. AGL/882 ft. AMSL (Admin BLDG)

To facilitate the public comment process, all proposals which exceeded a Title 14 CFR Part 77 obstruction standard were included in the public notice issued under case study 2014-ANE-1770-OE. However, separate determinations will be made for each case. All comments received by the circularization deadline of February 27, 2015 were considered in completing each determination for the case studies listed above.

The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surfaces established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures also exceed the VFR traffic patterns Horizontal Surface as applied to visual approach runways at OXC by the following:

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures were circularized on January 21, 2015 under case study 2014-ANE-1770-OE, as previously mentioned, to all know aviation interests and non-aeronautical interests that may be affected by the proposal. Five letters of objection were received by the date due for consideration as a result of circularization and summarized below:

Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

That said, although stack effluents is not germane to an airspace study, the question was asked in the spirit of addressing the responders' concerns. Effluents generated from the stacks will be composed largely of air, and at times water vapor, covered under the appropriate air permits issued by the Connecticut Department of Energy and Environmental Protection (DEEP). Other pollutants must maintain levels consistent with DEEP permitting requirements. The proponent has advised that in most atmospheric conditions no water vapor would be visible. Under cold outside air temperatures (below 40 degrees Fahrenheit or 100 percent humidity), some visible water vapor could be generated, but it would dissipate prior to reaching traffic pattern altitude. The expected temperature of the effluent as it reaches the top of the stacks should be between 184 degrees and 294.5 degrees Fahrenheit and would also rapidly dissipate. Increased wind velocity and colder ambient temperatures result in even more rapid cooling. Prevailing winds in the area of OXC have a westerly or northerly component and would aid in moving possible effluents away from the airport.

As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

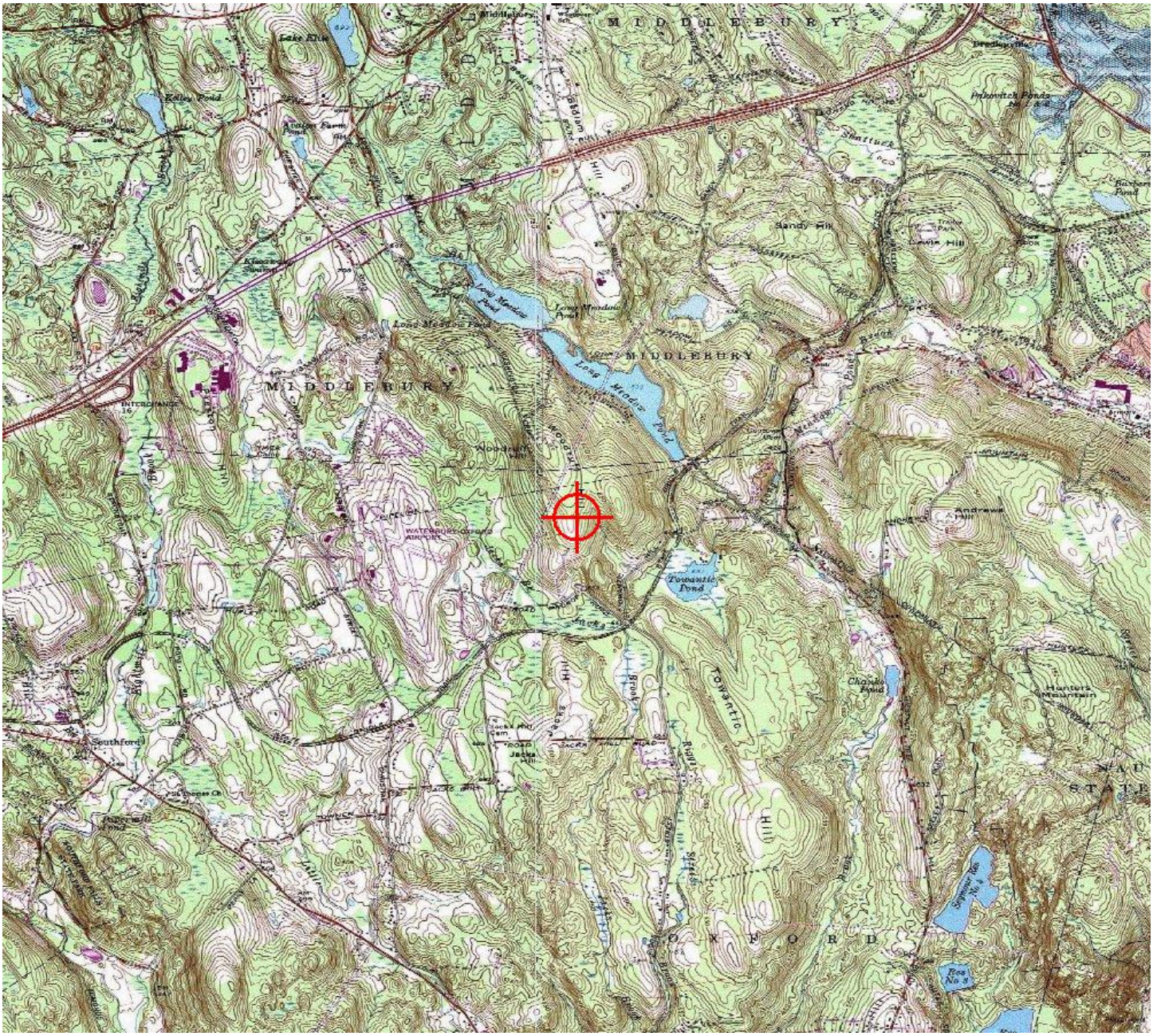
Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

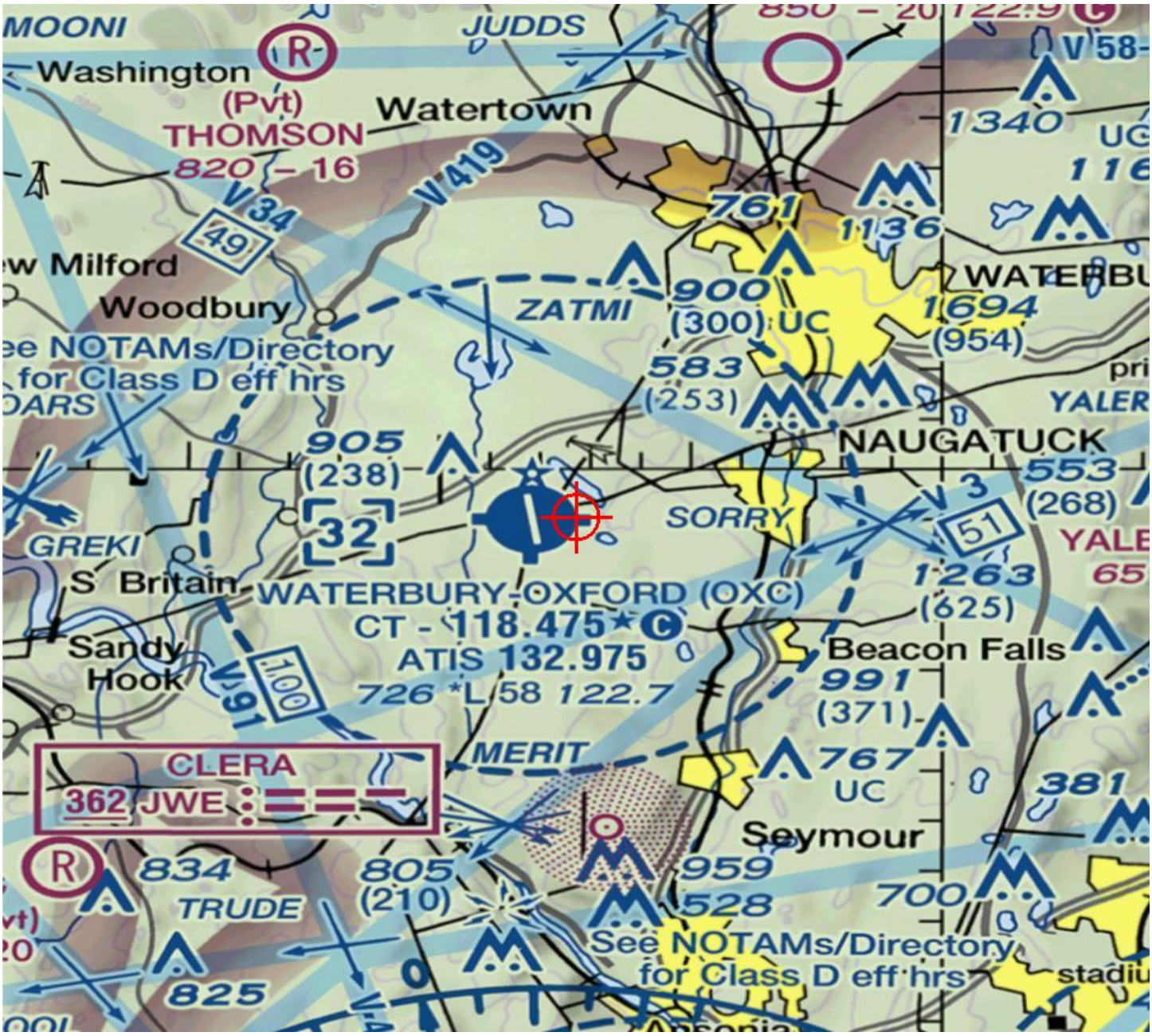
*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

Case Description for ASN 2014-ANE-1770-OE

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property. This notice is a re-submission of 2014-ANE-931-OE, with a 1-foot decrease in base site elevation.

TOPO Map for ASN 2014-ANE-1770-OE

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for Class D eff hrs
825

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1771-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Stack Stack #2
Location:	Oxford, CT
Latitude:	41-29-01.13N NAD 83
Longitude:	73-07-19.66W
Heights:	830 feet site elevation (SE)
	150 feet above ground level (AGL)
	980 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, paint/red lights - Chapters 3(Marked),4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Any height exceeding 150 feet above ground level (980 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1771-OE.

Signature Control No: 227940258-254158052 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1771-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

2014-ANE-1770-OE 41-29-01.44N 73-07-17.91W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1771-OE 41-29-01.13N 73-07-19.66W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1908-OE 41-29-02.91N 73-07-23.40W 62 ft. AGL/892 ft. AMSL (Aux Boiler Stack)
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2014-ANE-1910-OE 41-28-59.75N 73-07-17.26W 48 ft. AGL/878 ft. AMSL (Fuel Oil Tank)
2014-ANE-1911-OE 41-28-59.28N 73-07-22.57W 85 ft. AGL/915 ft. AMSL (Air Condenser)
2014-ANE-1912-OE 41-29-07.68N 73-07-22.37W 65 ft. AGL/895 ft. AMSL (Switchyard Tower)
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2014-ANE-1924-OE 41-29-02.69N 73-07-23.43W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1925-OE 41-29-03.10N 73-07-21.05W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1926-OE 41-29-03.67N 73-07-21.22W 52 ft. AGL/882 ft. AMSL (Admin BLDG)

To facilitate the public comment process, all proposals which exceeded a Title 14 CFR Part 77 obstruction standard were included in the public notice issued under case study 2014-ANE-1770-OE. However, separate determinations will be made for each case. All comments received by the circularization deadline of February 27, 2015 were considered in completing each determination for the case studies listed above.

The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surfaces established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures also exceed the VFR traffic patterns Horizontal Surface as applied to visual approach runways at OXC by the following:

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures were circularized on January 21, 2015 under case study 2014-ANE-1770-OE, as previously mentioned, to all know aviation interests and non-aeronautical interests that may be affected by the proposal. Five letters of objection were received by the date due for consideration as a result of circularization and summarized below:

Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

That said, although stack effluents is not germane to an airspace study, the question was asked in the spirit of addressing the responders' concerns. Effluents generated from the stacks will be composed largely of air, and at times water vapor, covered under the appropriate air permits issued by the Connecticut Department of Energy and Environmental Protection (DEEP). Other pollutants must maintain levels consistent with DEEP permitting requirements. The proponent has advised that in most atmospheric conditions no water vapor would be visible. Under cold outside air temperatures (below 40 degrees Fahrenheit or 100 percent humidity), some visible water vapor could be generated, but it would dissipate prior to reaching traffic pattern altitude. The expected temperature of the effluent as it reaches the top of the stacks should be between 184 degrees and 294.5 degrees Fahrenheit and would also rapidly dissipate. Increased wind velocity and colder ambient temperatures result in even more rapid cooling. Prevailing winds in the area of OXC have a westerly or northerly component and would aid in moving possible effluents away from the airport.

As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

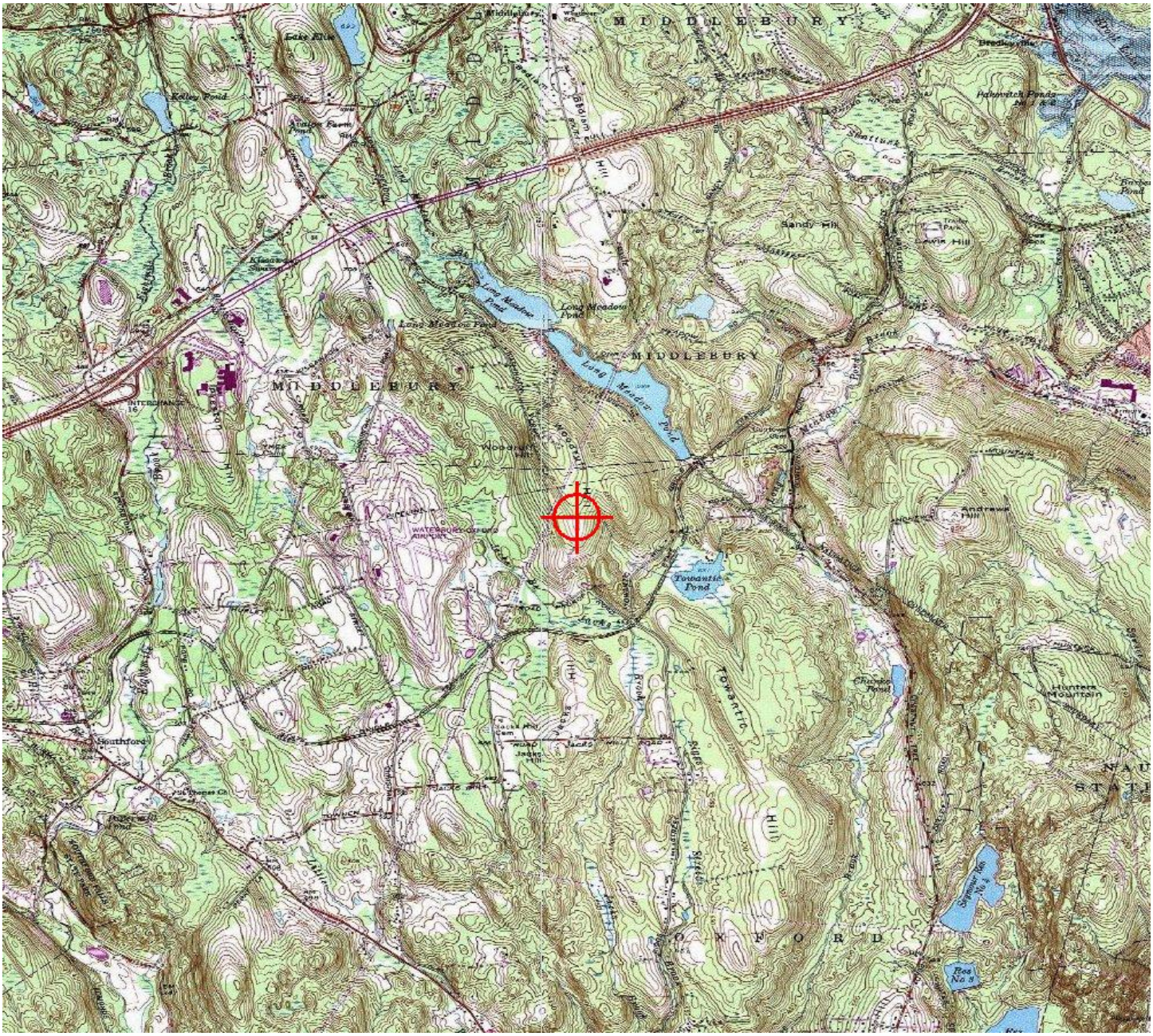
Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

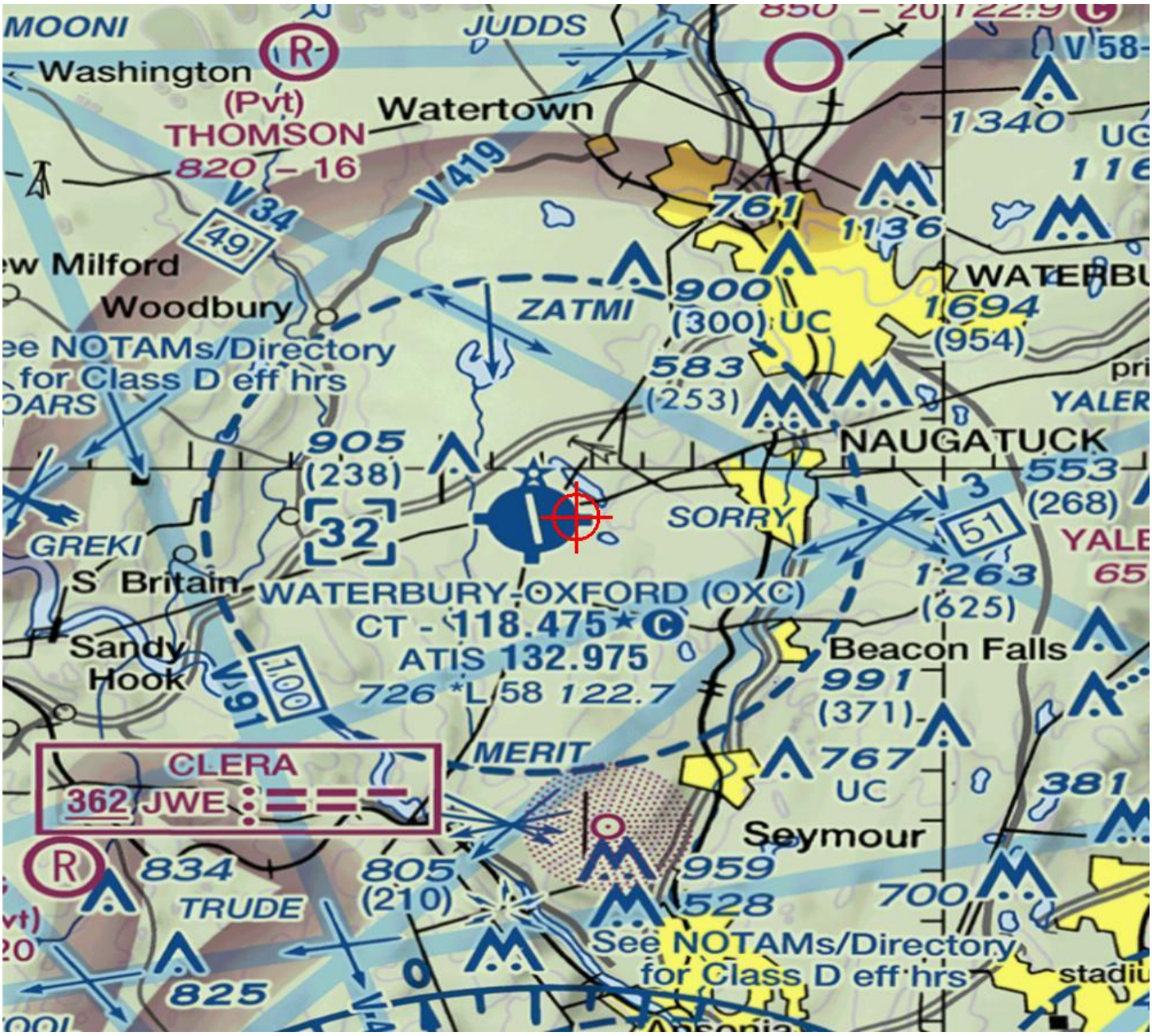
*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

Case Description for ASN 2014-ANE-1771-OE

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property. This notice is a re-submission of 2014-ANE-932-OE, with a 1-foot decrease in base site elevation.

TOPO Map for ASN 2014-ANE-1771-OE

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TRUDE
See NOTAMs/Directory
for Class D eff hrs
825

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-ANE-1912-OE

Issued Date: 06/05/2015

Andrew Bazinet
CPV Towantic, LLC
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Switchyard Tower
Location:	Oxford, CT
Latitude:	41-29-07.68N NAD 83
Longitude:	73-07-22.37W
Heights:	830 feet site elevation (SE)
	65 feet above ground level (AGL)
	895 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Any height exceeding 65 feet above ground level (895 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 12/05/2016 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before July 05, 2015. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on July 15, 2015 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Darin Clipper, at (404) 305-6531. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ANE-1912-OE.

Signature Control No: 228977203-254162159 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Case Description
Map(s)

Additional information for ASN 2014-ANE-1912-OE

The proposal is for several structures (two stacks, air cooled condenser, administrative building, switchyard tower, auxiliary boiler stack, gantry crane, and fuel oil storage tank) associated with a new power plant (dual-fueled electric generating facility) that would be located 3,805 ft. - 4,353 ft. northeast of the Airport Reference Point for the Waterbury-Oxford Airport (OXC), Waterbury, CT. Each of the proposed structures has been studied separately under the following Aeronautical Study Numbers:

2014-ANE-1770-OE 41-29-01.44N 73-07-17.91W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1771-OE 41-29-01.13N 73-07-19.66W 150 ft. AGL/980 ft. AMSL (Stack)
2014-ANE-1908-OE 41-29-02.91N 73-07-23.40W 62 ft. AGL/892 ft. AMSL (Aux Boiler Stack)
2014-ANE-1909-OE 41-29-02.56N 73-07-23.61W 83 ft. AGL/913 ft. AMSL (Gantry Crane)
2014-ANE-1910-OE 41-28-59.75N 73-07-17.26W 48 ft. AGL/878 ft. AMSL (Fuel Oil Tank)
2014-ANE-1911-OE 41-28-59.28N 73-07-22.57W 85 ft. AGL/915 ft. AMSL (Air Condenser)
2014-ANE-1912-OE 41-29-07.68N 73-07-22.37W 65 ft. AGL/895 ft. AMSL (Switchyard Tower)
2014-ANE-1923-OE 41-29-03.26N 73-07-23.61W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1924-OE 41-29-02.69N 73-07-23.43W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1925-OE 41-29-03.10N 73-07-21.05W 52 ft. AGL/882 ft. AMSL (Admin BLDG)
2014-ANE-1926-OE 41-29-03.67N 73-07-21.22W 52 ft. AGL/882 ft. AMSL (Admin BLDG)

To facilitate the public comment process, all proposals which exceeded a Title 14 CFR Part 77 obstruction standard were included in the public notice issued under case study 2014-ANE-1770-OE. However, separate determinations will be made for each case. All comments received by the circularization deadline of February 27, 2015 were considered in completing each determination for the case studies listed above.

The proposed structures were identified as an obstruction under the standards of Title 14 CFR Part 77, as applied to OXC as follows:

Section 77.17 (a) (5): The surface of a takeoff and landing area of an airport or any imaginary surfaces established under 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

Section 77.19 (a): A Horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
2014-ANE-1910-OE: Exceeds by up to 2 ft.
2014-ANE-1911-OE: Exceeds by up to 39 ft.
2014-ANE-1912-OE: Exceeds by up to 19 ft.
2014-ANE-1923-OE: Exceeds by up to 6 ft.
2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures also exceed the VFR traffic patterns Horizontal Surface as applied to visual approach runways at OXC by the following:

2014-ANE-1770-OE: Exceeds by up to 104 ft.
2014-ANE-1771-OE: Exceeds by up to 104 ft.
2014-ANE-1908-OE: Exceeds by up to 16 ft.
2014-ANE-1909-OE: Exceeds by up to 37 ft.
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2014-ANE-1924-OE: Exceeds by up to 6 ft.
2014-ANE-1925-OE: Exceeds by up to 6 ft.
2014-ANE-1926-OE: Exceeds by up to 6 ft.

The proposed structures were circularized on January 21, 2015 under case study 2014-ANE-1770-OE, as previously mentioned, to all know aviation interests and non-aeronautical interests that may be affected by the proposal. Five letters of objection were received by the date due for consideration as a result of circularization and summarized below:

Objection: Responders were concerned citizens (1 pilot, 4 non-pilot) and submitted letters objecting to the proposal based on the potential adverse effect on aviation operations from the exhaust stack effluents that would dissipate into the air as it relates to the OXC VFR traffic pattern to include Title 14 CFR Part 77 obstruction standards exceeded.

Response: The FAA has studied the effects of stack effluents in the past including some studies that were quoted, in part, by the responders. As a word of caution, it would be important to understand the entire context of any study rather than selected excerpts if a decision is to be made based upon that study. To date, current FAA policy does not consider stack effluents to be germane to an airspace study covered under Title 14 CFR Part 77 Obstruction Standards.

That said, although stack effluents is not germane to an airspace study, the question was asked in the spirit of addressing the responders' concerns. Effluents generated from the stacks will be composed largely of air, and at times water vapor, covered under the appropriate air permits issued by the Connecticut Department of Energy and Environmental Protection (DEEP). Other pollutants must maintain levels consistent with DEEP permitting requirements. The proponent has advised that in most atmospheric conditions no water vapor would be visible. Under cold outside air temperatures (below 40 degrees Fahrenheit or 100 percent humidity), some visible water vapor could be generated, but it would dissipate prior to reaching traffic pattern altitude. The expected temperature of the effluent as it reaches the top of the stacks should be between 184 degrees and 294.5 degrees Fahrenheit and would also rapidly dissipate. Increased wind velocity and colder ambient temperatures result in even more rapid cooling. Prevailing winds in the area of OXC have a westerly or northerly component and would aid in moving possible effluents away from the airport.

As it relates to the latter public concern, even though a structure may exceed one or more Title 14 CFR Part 77 Obstruction Standards whereby it is considered to have an adverse aeronautical effect, it must rise to the level of substantial adverse effect to be deemed a hazard to air navigation.

There would be no effect on any existing or proposed arrival, departure or en route instrument (IFR) operations or procedures.

The proposed structures would exceed 77.19 (a) and also be located within the traffic pattern airspace (TPA) for all categories of aircraft using the Waterbury-Oxford Airport. However, the normal flight path for an aircraft within a traffic pattern is based upon the category/approach speed of said aircraft. The higher the category/approach speed, the larger the traffic pattern flown. Category A aircraft would be the most likely aircraft affected by the proposed project as this traffic pattern keeps those category aircraft closer to the airport thereby closer to the proposed structures more so than any other category of aircraft when OXC is utilizing left traffic to Runway 18 or right traffic to Runway 36.

The proposed structures would be located abeam and approximately one half nautical mile (NM) from OXC Runway 18/36 which would place the proposed structures in the level flight portion of the downwind leg of the traffic pattern (see note below). It is a commonly accepted practice for aircraft to establish the downwind leg of their traffic pattern approximately one nautical mile from the runway (farther for Category B or larger aircraft). The expected flight path of aircraft on the downwind leg of the traffic pattern would place an aircraft approximately 2,100 ft. east of the proposed structures. It is unlikely than an aircraft would need to fly directly over this proposed structures, as the traffic pattern for category A aircraft extends up to 1.25 NM abeam the runway and therefore should not require a VFR aircraft to change its regular flight course or altitude when entering or establishing the aircraft on down wind or completing pattern work.

To date, the traffic pattern altitude at OXC is 1,699 ft. AMSL for aircraft up to 12,500 pounds or 2,199 ft. for aircraft greater than 12,500 pounds. The airport elevation is 726 ft. AMSL and the proposed height of the tallest structure is 980 ft. AMSL. The difference is 254 ft. FAA Order 7400.2 states that structures up to 500 ft. AGL may be acceptable in the level flight portion of a traffic pattern bases upon specific circumstances. Aircraft operating at the established pattern altitude should be a minimum of 719 ft. or more above the proposed structures depending on the traffic pattern being flown.

It was also found that the proposed structures would not restrict the clear view of any runway or traffic pattern from the tower cab or derogate the airport's capacity or efficiency or affect the usable length of any existing or planned runway. Additionally, the Connecticut Airport Authority is on record and reserves the right to modify/raise the traffic pattern altitude for Category A aircraft or restrict the airport's traffic pattern use to the west side of the airport, as do many airports because of rising terrain, obstruction avoidance, etc. as it deem necessary at any time. (Right downwind to Runway 18, Left downwind to Runway 36 only)

Study for possible visual flight rules (VFR) effect disclosed that the proposed structures would have no substantial adverse effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at OXC or any other known public use or military airports. At 150 ft. AGL or below, the proposed structures would not have a substantial adverse effect on VFR en route flight operations.

The proposed structures should be appropriately obstruction marked and lighted to make it more conspicuous to airmen in the event circumnavigation would become necessary.

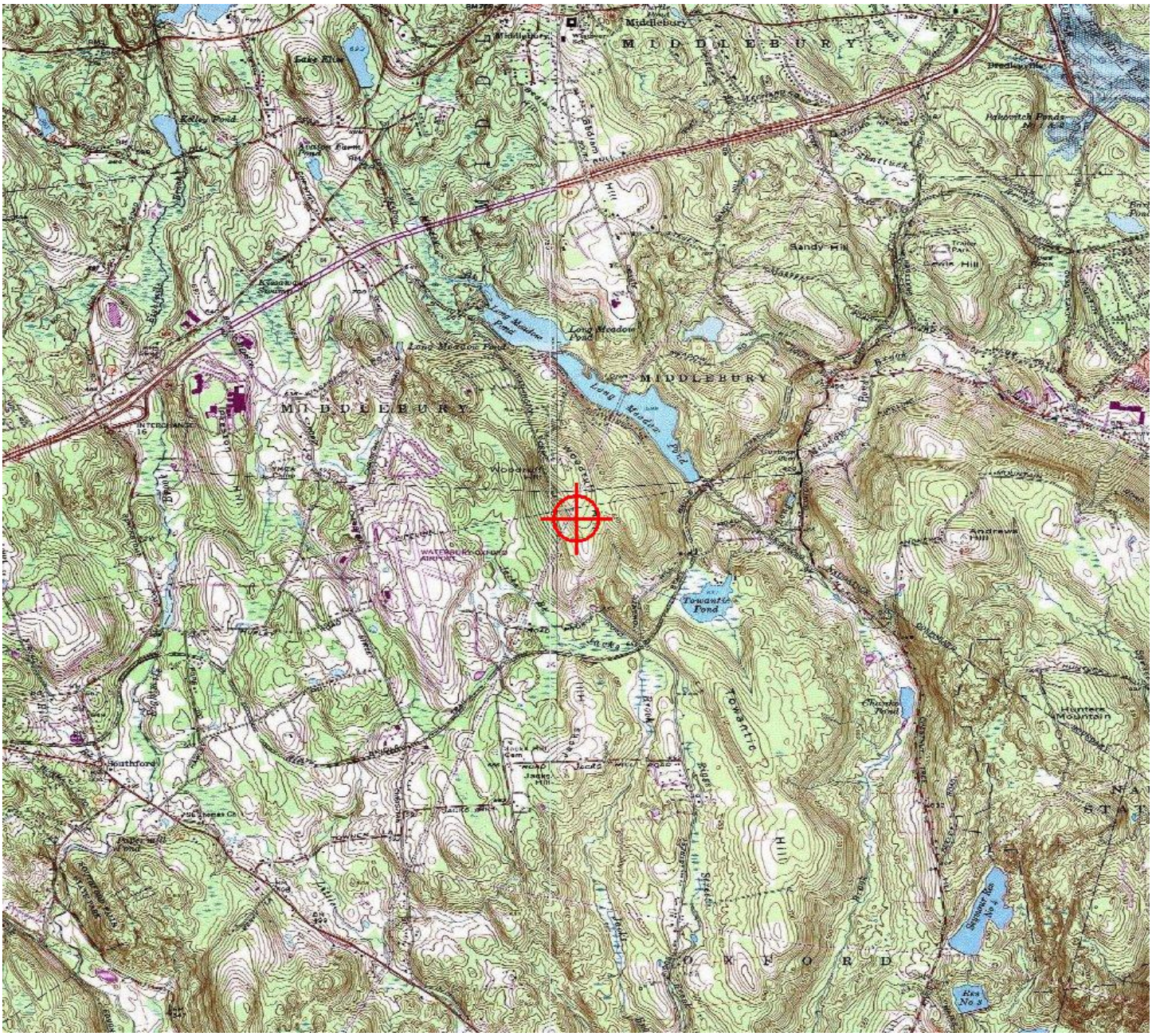
The cumulative impact of the proposed structures, when combined with other proposed and existing structures previously evaluated by the FAA are not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigation facilities, nor would the proposal affect the capacity of any known existing planned public-use or military airport.

Therefore, it is determined that the proposed structures would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions specified within this determination are met.

*Note: Downwind leg is defined as a flight path parallel to the landing runway in the opposite direction of landing.

CPV Towantic, LLC is proposing development of a combined-cycle electric generating facility on the 26-acre property.

TOPO Map for ASN 2014-ANE-1912-OE



Sectional Map for ASN 2014-ANE-1912-OE

U.S. Department
of Transportation
Federal Aviation Administration

Airspace Policy and
ATC Procedures Group
800 Independence Ave., S.W.
Room 423
Washington, DC 20591

Obstruction Evaluation Case No.
2015-AWA-8-OE

Issued Date: 07/08/2015

Raymond Pietrorazio
1212 Whittemore Road
Middlebury, CT 06762

****NOTICE OF VALID PETITION RECEIVED****

The Federal Aviation Administration has examined your petition under the provisions of Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure Type:	Several Structures (Power Plant)
Aeronautical Study Numbers:	2014-ANE-1770-OE
	2014-ANE-1771-OE
	2014-ANE-1908-OE
	2014-ANE-1909-OE
	2014-ANE-1910-OE
	2014-ANE-1911-OE
	2014-ANE-1912-OE
	2014-ANE-1923-OE
	2014-ANE-1924-OE
	2014-ANE-1925-OE
	2014-ANE-1926-OE

Specifically, part 77.37(a), allows the sponsor of any proposed construction or alteration, or any person who stated a substantial aeronautical objection to it in an aeronautical study, or any person who has a substantial aeronautical objection to it but was not given the opportunity to state it, may petition the Administrator within 30 days after the issuance of the determination.

We have reviewed your petition and find that it meets the criteria in part 77. Your petition for discretionary review is being considered and we will advise you whether the review is granted or denied.

The determination(s) issued for the subject Aeronautical Study Number(s) will not become final pending disposition of the petition. The Federal Communications Commission (FCC) will also be notified if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (202) 267-8783. On any

further correspondence, please refer to Obstruction Evaluation Case Number 2015-AWA-8-OE.

Sincerely,

Gary A. Norek (VALID)
Manager, Airspace Policy and Regulations Group, AJV-11

cc: CPV Towantic, LLC
Tetra Tech, Inc.

BOROUGH OF NAUGATUCK
WATER POLLUTION CONTROL AUTHORITY

229 CHURCH STREET
NAUGATUCK, CT 06770
(203) 720-7060

April 20, 2015

Mr. Andrew Bazinet
Competitive Power Ventures, Inc.
50 Braintree Hill Office Park
Suite 300
Braintree, MA 02184

Re: CPV Towantic Energy Plant – Town of Oxford, CT
Permit Application No. 199902285 – Approval

Dear Mr. Bazinet:

Please note the following as recorded in the minutes of the Regular Meeting of the Water Pollution Control Authority held on April 16, 2015 and subject to the minutes being approved at the next WPCA scheduled meeting on May 21, 2015. Enclosed is the Engineering Report Dated April 16, 2015.

The commission voted:

VOTED: Unanimously on a motion by Rimas Balsys and seconded by Pat Mallane to **APPROVE** the following motion, Read by, WPCA Chairman, Ron Merancy.

The Water Pollution Control Authority GRANT the Applicant's CPV Towantic LLC Discharge Permit Application in Accordance with the Conditions set forth in the Naugatuck Water Pollution Control Authority Engineering Report Dated April 16, 2015.

VOTE: **In Favor:** 5 **Opposed:** 0 **Abstained:** 0
No Discussion
Motion Carried: 5-0-0

Cc: Attorney Edward Fitzpatrick, Attorney Alicia Perillo, WPCA File

Naugatuck Water Pollution Control Authority (WPCA)
Engineering Report

Project: CPV Towantic Energy Center
Location: Oxford, CT
Documents: 4-7-15
Applicant: CPV Towantic, LLC
James R Stewart, P.E. L.S. Director of Public Works
Date: 4-16-2015

Comments:

I recommend that the Naugatuck WPCA authorize the CPV Towantic Energy Center sanitary sewer connection with the following conditions:

1. The WPCA approval will expire after five (5) years if construction on the project has not begun.
2. The maximum daily sanitary sewer discharge shall be 4,320 gallons per day (GPD). The sewer discharge shall contain only service and domestic water uses. The discharge shall not contain boiler blowdown or evaporative cooler blowdown.
3. CPV Towantic shall not discharge storm water from the facility or from equipment containment area to the sanitary sewers.
4. CPV Towantic shall submit construction drawing pertaining to water use and discharge to the Naugatuck WPCA for review prior to construction.
5. CPV Towantic shall submit as-built drawing of all storm sewers and sanitary sewers showing all outfalls and connections to the Naugatuck WPCA as well as appropriate emergency management authorities.
6. CPV Towantic shall provide for an inspection of both sanitary and storm water facilities at the proposed site prior to startup by Naugatuck WPCA staff.
7. CPV Towantic shall provide spill protection and grade the site to ensure that spills are contained on site and do not enter the sanitary sewer.
8. A minimum 1,000 gallon oil water separator shall be installed for the service water usage including facility indoor floor drains. The oil water separator shall be capable of removing free oil to less than 10 ppm and suspended solids to less than 50 ppm.
9. A continuous flow meter shall be installed to monitor the sanitary sewer discharge. The flow meter shall be annually calibrated. Flow and calibration results shall be reported to the Naugatuck WPCA as often as reported to the DEEP.
10. CPV Towantic shall submit one copy of the Spill Prevention Control and Countermeasures Plan to the Naugatuck WPCA prior to facility start up.
11. CPV Towantic shall provide the Naugatuck WPCA copies of all DEEP sanitary sewer sampling and reports concurrently with the submission to the DEEP.
12. CPV Towantic shall submit to the Naugatuck WPCA two rounds of sampling of the combined sanitary sewer flow including total arsenic, total chromium, total copper, total magnesium, total nickel, total silver, total zinc and total oil& grease. The daily composite samples shall be taken immediately after the facility is in operation and after six 6 months of operation. Additional sampling may be required by the Naugatuck WPCA following review of the results.
13. All costs and expenses incurred by the Naugatuck WPCA related to the review and evaluation of the above conditions shall be the responsibility of CPV Towantic.
14. CPV Towantic shall provide annual training to personnel regarding maintenance of the waste water facilities, good housekeeping procedures and spill prevention. Documentation of the training shall be submitted to the Water Pollution Control Authority.